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Med.
N.

THE MEDICAL RECORD.

A Weekly Journal of Medicine and Surgery.

EDITED BY

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Volume XI.

JANUARY 1, 1876—DECEMBER 30, 1876.

NEW YORK:
WILLIAM WOOD & COMPANY,
27 GREAT JONES STREET.

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NEW YORK.

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THE MEDICAL RECORD.

Vol. XI. JANUARY 1, 1876. No. 1

Original Lecture.

THE INFLAMMATIONS AND THE CONGESTIONS OF THE NON-GRAVID UTERUS.

PRELIMINARY LECTURE,

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PART I.

GENTLEMEN:—The uterine affections I am next to consider are very little understood by the general practitioner; and are the least of all settled, so far as their actual pathology is concerned, by gynæcologists themselves. It may be too much for me to expect to educe order out of the common confusion, or to reconcile the diverse opinions which exist respecting them; but I hold it to be the duty of all who have had the opportunity, and have taken the time to form definite and decided conclusions, to contribute what they may in this direction. I shall therefore offer no apology for giving my own individual and independent views, as they have been forced upon me and confirmed by the study and treatment of uterine affections for the past thirty years.

It will be understood that my subject includes all the inflammations and the congestions to which the uterus is liable, except during gestation, and during the usual period of convalescence after parturition; and the three principal causes of the hitherto unsatisfactory progress respecting them will need to be considered at the outset.

1. Vague and incorrect ideas of the nature and peculiarities of inflammation.

2. The assigning to inflammation a too extensive influence in uterine pathology.

3. The mistaking another entirely different condition for inflammation.

I. Though the consideration of inflammation in a general way belongs to general pathology, I find it necessary, for the reason just assigned, to premise the views I have for so long a time held, and publicly taught since 1845; and without the aid of which, as I believe, the subjects I am next to speak of cannot be rightly understood. I need not explain how my attention was first turned to this subject, nor allude to my inquiries in this direction, further than to say that I commenced by endeavoring to understand, and by experimentally testing everything which had been previously done* by others—proving my own views by the microscope and by clinical observation. I am not, I may also add, unaware of the views since promulgated by the Edinburgh School of Medicine, and by German pathologists, especially Virchow, and others,* while finding my own scarcely at all modified, except as new discoveries have tended to confirm them.

I shall confine myself to inflammation in the vascular tissues, in order to avoid a discussion here, which would otherwise arise—merely remarking that the "parenchymatous inflammation" of Virchow, and which may occur in cartilage, is, for me, not inflammation at all.

It would also be foreign to my present purpose to discuss the subject of inflammation and congestion in a systematic manner. I can here only summarize my views in an aphoristic form, under the following nine propositions:

1. Inflammation is not a mere *state* of a part, as quoted from Celsus for almost 1,700 years, in which there is redness, heat, pain, and swelling. It is a *process* going on in the part, and the four signs just mentioned do not distinguish it from still another pathological condition.

2. Congestion, on the other hand, is merely a state of a part, in which redness, heat, pain, and swelling may exist; but it is *not* a process.

3. Inflammation has its own characteristics, immediate effects, and sequelæ, if any at all ensue, and they very frequently do ensue. Congestion also has its own effects and sequelæ, both differing, however, from those of inflammation, and much more rarely ensuing.

4. Inflammation is *not the reparative process*, as is still asserted on the now obsolete authority of Hunter, who would scorn such a proposition were he the physiologist of to-day instead of a century ago. But it is directly opposed to and preventive of it. If inflammation attack a wound while healing, the reparative process is at once arrested, and a retrograde action ensues till the inflammatory process ceases.

5. Inflammation is a process, *sui generis*, as shown by its phenomena and effects; the reparative is another process, unlike all others in its symptoms and results. The former is always pathological, always to be deprecated, and never to be invoked; the latter is always a physiological process, and always desirable in the circumstances in which it can occur.

An exception to the first part of the preceding sentence is found in the use of blisters. Certain apparent exceptions I cannot stop to specify.

6. Inflammation is always the same process† wherever found, though modified by the structure and the state of the part. It very rarely occurs primarily in the muscular tissue, whether striated or non-striated. Congestion is also rare in the former, but very common in the latter; and in the uterus and the ovaries it is, during menstruation, a physiological condition.

7. Inflammation is frequently accompanied or followed by suppuration and by ulceration; but both these may occur independently of it. The presence of either in a part, therefore, is not to be accepted as proof of the previous existence of inflammation there.

* By Wilson Phillips, John Thompson, Gendrin, Kaltenbrunner, Gerber, Müller, Alison, Lobert Gulliver, Lister, Sen., Addison, C. J. B. Williams, and Hughes Bennett.

* Wharton Jones, Henle, Virchow, Paget, John Simon, Joseph Lister, Stricker, Cohnheim, Recklinghausen, Prussak, and Beale.

† The only modifications of inflammation of practical importance are the sthenic and the asthenic forms.

without other corroborative facts. Suppurative and ulcerative inflammation are terms really indicating no peculiarity in the process itself, but only in the disposal of the inflammatory exudation.

8. Inflammation is essentially an acute process, *i.e.*, it is perfectly developed and brought to an end in a few days at longest, and often in a few hours, from the attack. This process may, however, be repeated an indefinite number of times in a part, with intervals of varying duration, though always itself characterized by a short duration.

Congestion, on the other hand, may continue through protracted periods—many months, and even many years.

9. Chronic inflammation is, therefore, a contradiction and a chimera. And I find that all the chronic inflammations, so called, of the uterus, are simply chronic congestions of that organ. Actual inflammation may, however, recur from time to time, in a chronically congested part—there to rapidly run its course and disappear.

The *characteristics* of the inflammatory process, which distinguish it from all other processes, will appear as I speak next of its local and its general phenomena.

CHARACTERISTICS OF INFLAMMATION.

Whatever view in other respects may be held of inflammation occurring in vascular parts, it must be admitted that its most prominent characteristic is an exudation of the plasma of the blood into the extravascular spaces, and among the histological elements of the part affected. For, if it be asserted with Alison, who wrote nearly forty years ago, and more recently with Virchow, that a *tendency* only to exudation characterizes inflammation, that tendency is never discoverable till the exudation has actually occurred. But since this term is sometimes used instead of effusion, and *vice versa*, and sometimes even instead of extravasation, the precise meaning of each of these words should be here defined.

1. By effusion is meant the escape from the blood-vessels of the serum (nearly) of the blood, the fibrin, and the blood-corpuscles still remaining in them. An effusion cannot become organized, since it contains no fibrin; but may remain indefinitely, to produce œdema or swelling of the part, or may be absorbed. Effusion very often occurs as a consequence of passive congestion, but not of inflammation.

2. By exudation is understood the escape of the plasma of the blood, or *liquor sanguinis*—*i.e.*, all the blood except the corpuscles, from the blood-vessels,* among the histological elements of the part. An inflammatory *exudation* is therefore *organizable*. Chloride of sodium, phosphates, and albumen exist in it in larger proportion than in the blood (Simon).

3. By *extravasation* it is understood that the blood, all its constituents included, escapes from the vessels among the structural elements of the part.† This may occur in connection with either congestion or inflammation, but accidentally, and not as a characteristic of either. An extravasation is not organizable, since the presence of the blood-corpuscles, constituting very nearly one-half of the bulk of the blood, interferes with the organization of the associated plasma. It may remain for an indefinite period, still fluid or coagulated, or be absorbed, or be converted into a purulent mass and be discharged. In certain low conditions an exudation may become red, not from the presence of the corpuscles, but merely of the coloring matter of the blood (Paget). Effusion, exudation, and extravasation—all alike produce œdema or swelling of the part, which is therefore not a sign of inflammation only. The local characteristic of inflammation is the exudation.

But another recognized local sign of inflammation is increased redness of the part. This, of course, is not to be detected in parts not visible; but, admitting its existence, it also equally exists in congestion, and is therefore not distinctive as a characteristic.*

And the same may be said of the existence of increased heat as a sign of inflammation in the part; it can be verified only in parts which can be directly or indirectly reached; and it also occurs in active congestion, though in a minor degree.

In regard to pain and tenderness on pressure, of which so much has been written, as a sign of inflammation, it should be remarked that it is not very seldom absent in inflammation, while it is also very often, and in some parts almost universally present in congestion. Pure neuralgia also occurs, of course independently of either of these conditions. Pain is therefore not a characteristic of inflammation, though a valuable symptom as directing attention to the affected organ, whether inflamed or otherwise.

But the capillaries of an inflamed part are in a peculiar and characteristic condition, as is also the blood in those capillaries. The former are dilated to the utmost degree short of rupture (and sometimes the latter when extravasation occurs, as has been seen), and the blood within them is stagnant, and consists of corpuscles alone—the *liquor* having exuded into the inter-capillary spaces. The corpuscles are also very adherent to the capillary walls.

The characteristic local signs of inflammation are therefore:

1. A peculiar state of the capillaries of the part.
2. A peculiar state of the blood in those capillaries.
3. An exudation into the inter-capillary spaces.

Redness, heat, pain, and swelling may also exist; but if so, they are not distinctive of this process.

Since the normal process of nutrition implies first a normal circulation, or supply of blood to the part; secondly, an exudation of plasma in the quantity required; and thirdly, its assimilation, or conversion into the tissue to be nourished—the inflammatory process is, in its nature, a perversion of the nutritive; both the circulation (or blood supply) and the exudation being abnormal, and the latter always excessive. The reparative process, on the other hand, is simply an exaggeration of the nutritive; the circulation and the exudation being increased just sufficiently to meet the demands for the repair.

Inflammation is also characterized by two general phenomena—an increase of fibrin in the blood as a whole, and a febrile reaction of a peculiar form.

Fibrin,† normally constituting 3 parts in 1000 of blood, has, in all inflammations decided enough to demand therapeutical interference, been found to be doubled at least, and is sometimes tripled. In

* Exudation is a mode of exosmosis through the capillary walls, they being a soft protoplasm, like a film of collodion (Virchow), homogeneous and sometimes nucleated.

† Extravasation usually implies a rupture of the capillaries: but Cohnheim (1868) and Recklinghausen have discovered the red corpuscles as well as the white, passing through their walls, and leaving no perceptible opening behind. Sometimes the red corpuscles are seen to be held for a time by the capillary walls, producing a constriction—one-half being within and the other outside of the vessel.

* The redness of inflammation is at first crimson, and darker than of active congestion: and often becomes livid. It is not removed by pressure; the redness of active congestion is so. It continues in the part after death; that of active congestion disappears. The redness of chronic *passive* congestion is with difficulty and but partially removed by pressure, and very slowly returns. When extreme and livid, it partially remains after death.

† The concrete fibrin (Denis), and not the dissolved fibrin or metalbumen, is here meant.

some diseases, as pneumonia and acute rheumatism, it rises to 9 and even 10 parts in 1000. This increased production of fibrin (hyperinosis) ceases with the cessation of the inflammation; but it cannot be made available in diagnosis, unless a considerable amount of blood is taken for examination.

But the febrile reaction, which is never absent in cases of inflammation severe enough to require treatment, is a most reliable sign.

It is very important, however, to distinguish this form of pyrexia from the fevers proper; and I refer you to the first volume of Miller's Principles and Practice of Surgery* for an able account of inflammatory fever, as it is there called. If it occur in a part, together with the four symptoms quoted from Celsus, it may be relied upon as deciding for inflammation as against mere congestion. And, conversely, the presence of heat, redness, pain and swelling, without the inflammatory pyrexia, indicates congestion merely. The fever will be either sthenic or asthenic (adynamic, typhoid) according to the form of the inflammation. In many instances it is the high temperature, and not the pain of inflammation, which exhausts and finally destroys the patient.

I conclude, then, that:

Inflammation is a process, sui generis, though a perversion of the nutritive process—characterized by an abnormal state of the vessels (the capillaries especially) of the part—and of the blood in those vessels, and by an excessive exudation of the blood-plasma into the intervascular spaces.

It is also characterized by a notable excess of fibrin in the blood as a whole, and by a febrile reaction of a peculiar kind.

I cannot here speak of the causes of inflammation, nor explain how they act, whether upon the vaso-motor nerves, or the muscular fibres of the minute vessels, and thus directly or indirectly. But it is necessary here to understand the various ways in which the inflammatory exudation, causing the swelling, as has been seen, may be subsequently disposed of. It must, however, be premised that the inflammatory process is exhausted, and brought to an end by the exudation; and all the changes subsequently occurring in the part constitute the "sequelæ" or "consequents" of inflammation.

A. In case the inflammatory process has occurred on a free surface—serous membrane, mucous membrane, or the skin—the exudation may be disposed of in the following ways:

1. An exudation upon a serous membrane, as in pleurisy or peritonitis, producing first a detachment of the epithelial layer to a greater or less extent, may

a. Be promptly absorbed (and in resolution).

b. Or remain for a considerable time in a fluid state in the serous cavity, and finally become purulent.

c. Or become coagulated, thus forming flakes of fibrin, or a so-called false membrane, which, becoming organized, constitutes adhesions of various forms.†

2. If the exudation occur upon a mucous membrane, it raises the epithelium from the basement layer (*i.e.*, produces an abrasion), if there be but a single layer of cells, and sometimes even if there be several, as when it occurs around the os uteri, producing the misnamed "ulceration" there. Thus the exudation arrives upon a free surface, where it undergoes the highest organization possible in the circumstances (exposed to the air and to motion); *i.e.*, it is developed into pus-cells, which, mingling with the epithelial cells, form a dense fluid, at first slight in quantity, and tinged by commixture with blood-corpuscles, but afterwards of a yellowish, creamy appearance, from the rapid formation of the epithelial elements. It has long been observed that there is very little, if any, pain in case of inflammation upon a mucous membrane after pus appears there; for the now very apparent reason that the inflammation has previously subsided. The abrasion also shows inflammation to have previously existed in these cases, and to have ceased.*

In some localities, however (the air-passages, vagina, etc.), the exudation may, instead of developing pus-cells, undergo coagulation, as upon a serous membrane, and thus a so-called false membrane be formed. An illustration is found in croup, and sometimes in vaginitis. This is by the German pathologists called "croupous inflammation;" but the process is the same as in other instances—the exudation simply being coagulated, as if upon a serous membrane.

On both serous and mucous membranes the secretion is greatly diminished (or arrested), and the quality changed.

3. In inflammation of the skin, also, the exudation raises and detaches the epithelium (produces a blister), and then undergoes the same change as usually on a mucous membrane; or if more deeply seated, it causes swelling of the derma or cutis vera, as in the parenchyma of an organ, and may then be absorbed, or converted into pus and be discharged. Both the vesication and the swelling may usually be seen (and sometimes also the suppuration) at the same time in different parts of a surface attacked by erysipelas. Virchow terms inflammation on the free surface "exudative," in reference to the throwing off of the exudation, as I have explained; an expression which, since the inflammatory process itself here presents no peculiarity, is calculated to mislead.

B. If inflammation attack the parenchyma or substance of an organ,† *i.e.*, is not on a surface, the exudation, causing a soft swelling of the part, may—

a. Be promptly absorbed, and the swelling removed; *i.e.*, resolution occurs.

b. Or it may remain fluid and become purulent, and then be discharged.

c. Or it may become coagulated and subsequently organized, and thus finally cause solidification or so-called *induration* of the part.

It has often been asserted that softening is the result of acute, and induration of chronic, inflammation. In fact, the former is merely the immediate effect of the presence of the inflammatory exudation in a part, while the latter is simply the result of its subsequent organization.

But induration must here be distinguished from another condition often mistaken for it,—I mean hypertrophy. The former results from the formation of new tissue among the original histological elements of the part, and which increases its size and solidity, as water absorbed by a sponge first increases the size and softness of the mass; but if the water subsequently be frozen, the whole is converted into a solid mass. Hypertrophy, on the other hand, is an actual growth

* Page 49 52.

† To call inflammation on a serous surface "adhesive," is therefore a misnomer. The adhesion results simply from the organization of the exudation on a membrane deprived of epithelium, in a state of almost entire rest, and secluded from the air.

* Of course, abrasions may occur independently of inflammation, as from ingesta directly denuding the epithelium.

† The parenchymatous inflammation of Virchow is not to be understood, but a process also occurring in muscular tissue, as cartilage; differing entirely from the proper inflammation in vascular parts, which I am considering, and attended by "cloudy swelling and a tendency to exudation."

of the structural elements themselves of a part: or, to follow out the comparison, an actual growth of the sponge-substance. Induration, therefore, merely proves the previous existence of an organizable exudation, and therefore of inflammation in the part. Hypertrophy, on the other hand, is the result of active congestion, as will be shown further on.

The importance of all the preceding distinctions will appear when I speak particularly of the inflammations and congestions of the uterus; and the second cause of the confusion respecting them will next be considered.

Original Communications.

DIVISION OF THE ISTHMUS OF THE THYROID GLAND TO RELIEVE DYSPNŒA IN BRONCHOCELE.

By FRANK HASTINGS HAMILTON, M.D., LL.D.,

NEW YORK.

Sir G. Duncan Gibb contributes to the *Lancet*, London, Jan. 23, 1875, a paper on the subject of goitre, and the relief of impending suffocation by excision, or by division of the isthmus of the thyroid gland, in which he relates a case in which he had operated successfully.

The case is very interesting and instructive, and some of the remarks of the distinguished operator deserve to be repeated. He says that he had long been observing these cases, and that he had become aware of the fact that the gland occasionally encircles the trachea completely, specimens of this kind being found in some of the hospital museums. And in this way a young man at Oxford died of suffocation under his own observation, the condition of the parts being verified by an autopsy. Sir Duncan Gibb concluded, therefore, that the surgeon ought to anticipate the complete ligation of the trachea by the gland, and operate by incision or excision of the isthmus, when this condition was seriously threatened. A suitable case being presented in the person of a woman, æt. 29, who had a small goitre of two years' standing, and which had already begun to interfere with her respiration, Sir Duncan did not hesitate to operate at once. The patient being under the influence of chloroform, the isthmus was exposed by a vertical incision, two inches in length, when the projecting central portion was found to be about the size of a "flattened walnut." By the aid of an aneurism-needle a strong ligature was passed beneath the isthmus on either side. "The isthmus was then freed to the inner side of each ligature, divided, and wholly removed, the trachea being observed to be quite free. There was not much bleeding."

I do not think it is entirely plain, from the account as published, that any portion of the isthmus was taken away. The language, "divided and wholly removed, the trachea being observed to be quite free," might be construed to mean that the isthmus, being divided, withdrew to either side (and later in the paper he speaks of this having actually occurred), and was thus wholly removed from the trachea. But this is not material; the surgeon thought, and so do I, that, in some cases at least, a complete division of the isthmus is all that would be required, especially as the two lateral ligatures enclosing the isthmus must cause a complete, or nearly complete, destruction of what of the gland there may be between the ligatures and the median line.

The patient called upon Sir Duncan about four months after, in perfect health; she had married, and there was not a trace of the old symptoms. The gland seemed to have receded on each side from the median line, leaving the front of the trachea completely exposed.

Another somewhat similar case is then given, in which division of the isthmus was made, but the result was not yet determined.

The writer concludes by saying that he believes this to be "the first occasion in which the isthmus has been either wholly removed or divided," etc.

In the first edition of my Treatise on Surgery, published in 1872, occurs the following passage:

"Several years since I was called to a gentleman, who was suffocating in consequence of the pressure of a goitre. The gland was very large, and it was at first thought that a free incision of the sterno-cleido-mastoid —which was drawn very tense over the tumor on each side—might afford relief; accordingly this muscle was divided, but no relief ensued. I then decided, after consultation with several medical gentlemen present, to cut through the isthmus down to the trachea. With this view the isthmus was exposed, and a very strong ligature passed between it and the trachea, first upon one side and then upon the other; after which the isthmus was divided in the median line, until the trachea was laid bare. To my surprise, no improvement in respiration followed this operation. As the only alternative remaining, and as death from suffocation was impending, the trachea was opened in the lower angle of the wound and a tube introduced. He now breathed freely, but he survived the operation only three or four days. An autopsy was made, and the specimen, being removed, was sent to me. It was now seen that the gland had completely encircled the upper rings of the trachea, and that the trachea itself had undergone at this point a remarkable constriction, so that it would scarcely admit an ordinary goose-quill. In such a case, and perhaps in many others which may be presented, no operation but tracheotomy could be expected to prolong the life of the sufferer or to give even temporary relief" (p. 696).

Having no notes of this case, I wrote to Dr. B. S. Hovey, a distinguished physician, now residing in Rochester, N. Y., who was present and assisted at the operation, for further particulars, and have received his reply as follows:

"Rochester, N. Y., Nov. 2, 1875.

"My Dear Sir:—It is with pleasure that I answer your interrogatories of the 29th ult.

"The gentleman upon whom you operated was the Rev. E. H. Walker, aged about 50. The operation was made on the 8th of January, 1849. There were present Drs. W. H. Reynale, S. L. Endress, E. W. Patchen, L. M. Cook, and myself. I am not certain whether Dr. Blake, of Dansville, was present or not. The four first are dead. Mr. Walker lived after the operation three days and four hours.

"The autopsy was made by myself, and the specimen sent to you at Buffalo. You returned me a cast, showing very clearly what you state in your Treatise on Surgery. I can add no facts to what you have said in your description of the case, except that for three days before the operation an attendant was constantly required to hold that part of the gland which lay to one side of the trachea (I don't remember which) up from the trachea to prevent suffocation. In your operation you removed that part of the gland which

was held back by the assistant before you introduced the tube. This was done after the isthmus was divided, hoping to relieve the pressure on the trachea. The cast you sent me shows the trachea encircled by the gland, and its internal diameter no larger than you state.

"I am very respectfully,

"Your obedient servant,

"B. S. HOVEY."

A PORTABLE BOOK-RACK FOR THE USE OF MYOPIC CHILDREN AND ADULTS.

By WILLIAM SHAW BOWEN, M.D.,

OPHTHALMIC AND AURAL SURGEON TO THE HARTFORD HOSPITAL.

A FEW years since, when Dr. Cohn, of Breslau, in Silesia, published the results of examining the eyes of 10,060 school children* in the lower, middle, and upper schools of that city, his statistics attracted great attention, and students of ophthalmic science have become impressed with the extreme importance of the subject and the results thus shown. Dr. Cohn was induced to undertake this task from ascertaining, when revising the statistics of Prof. Förster's clinic, that 750 short-sighted people had presented themselves within four years, and that of these 750 over 400 had applied on account of severe annoyance dependent upon the refractive defect. The result of Dr. Cohn's investigations discloses the fact that out of the 10,060 children examined 1,004 were myopic. The tendency to short-sightedness increased as the scholars advanced from the elementary schools upwards. In the middle schools the proportion was one-tenth, and in the examination of the educational centre of the city, the University of Breslau, two-thirds of the students were myopic.

These investigations have since been pursued by other competent authorities in Germany; and Drs. Webster and Cheatham, of New York, Thompson, of Philadelphia, and E. Williams, of Cincinnati, have published valuable information as to the refraction of the eyes of school children in this country. While the proportion is not so large as in Germany, it is still sufficient to cause the question to be asked, What can be done to prevent the development and increase of this scourge, as it were, that is overshadowing our children and subjecting them to constant annoyance and oftentimes danger to future vision. Of course this subject is plain to the ophthalmic specialist; the general hygiene of myopia has been for a long time reduced to exact and simple principles, and by him communicated with emphasis to all myopes who come under his professional care; but the attention of physicians in general practice has not been adequately directed to the extreme importance of the matter; for they are the ones who are called upon in the great majority of cases for advice as to the proper regimen for the short-sighted child, who perhaps complains of pain and smarting of the eyes after a hard day's work over school-books, and by them the hygienic rules to be followed should be disseminated as widely as they disseminate the laws of health pertaining to proper ventilation, sewerage, and the care of the body. The demand for a higher and more rapid educational system are heard on all sides; it is typical of the race for life. The average American follows, and the so-called best and perfect schools are those in which the youth is forced to the utmost of his powers, the eyes sharing in the overwork as well as the mental faculties. The statistics of reliable observers show the results of this "forcing system," and nothing can be more conclusive than the results of Cohn's researches in Breslau. The writer has not systematically examined the refraction of all school children's eyes in this city, but in one room in an intermediate school nine out of forty-one were myopes.

The general hygienic rules to be followed by short-sighted children, and those having an hereditary tendency thereto, are simple,—such as parents can be made to comprehend. Proper illumination, natural or artificial, a moderate use of the eyes if myopia exists, and avoidance of the stooping or recumbent position while engaged in study or when using the eyes for near objects requiring convergence of the optic axis, together with suitable glasses, comprise the chief of these laws, and simple as they are it is astonishing how thoroughly they are neglected. Our school furniture, usually a subject of pride, on account of architectural neatness and elegance, is usually sadly deficient as regards the height of desks, the angle at which they incline, and the distance between them and the seats. Dr. Cohn examined the school furniture at the Paris Exposition, and found the American desks as deficient in these respects as those of European make, as he has shown in an article, "The School-houses at the Paris Exposition, from a Hygienic Point of View." The child is compelled to stoop and to bring his face close to the desk, in order to see the letters, the type of school-books being generally small and defective as regards clearness, and this stooping position and the straining of the internal recti muscles in efforts of convergence causes congestion, which may cause the refractive error, if an hereditary tendency thereto exists, or increase it if it already exists in an extremely moderate degree. Stooping and excessive convergence cause congestion of the tunics of the globe; congestion by mechanical pressure tends to increase the bulging at the posterior pole, thus increasing the myopia. Aside from the use of improper glasses, these two last are the most important factors in causing progressive myopia, and consequently to keep the head erect, to bring the book to the face and not the face to the book, should be the desideratum of all myopes.

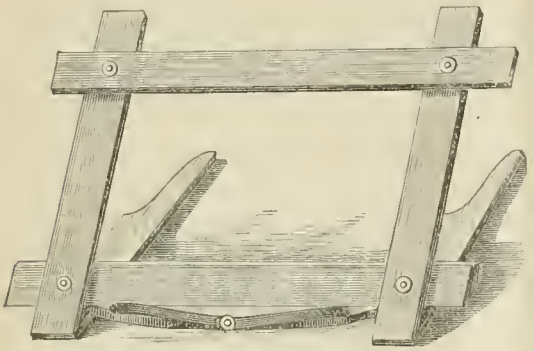
This, however, experience teaches, is exceedingly difficult to do. The child will not hold up the book; he becomes tired, and finds it is easier to lean over the desk where the book finds support. It is with difficulty that the adult myope of average intelligence can be induced to systematize the position of book or paper, although he may be the subject of progressive posterior polar atrophy, and its consequent fatal results to vision fully made known to him.

In considering this subject the writer has frequently imagined a school desk, which, by its strict regard for the hygiene of the eyes in the way of construction and in its relation to the seat, might avert in a certain degree some of the evils above mentioned. After careful inquiries of builders of school furniture, and of school committee-men, it was ascertained that any radical change of form, unless of such a nature that all could be uniform, would increase the cost of the article so as to prevent a ready sale. Economy of first cost enters largely into the consideration of the average school committee-man in fitting out his school room, and as a desk built on strictly hygienic principles would be an innovation of a marked character, it was impossible to find a manufacturer who could be induced to consider the importance of the subject sufficiently to build desks that would correct existing evils. A portable rack that can be adapted to any of the present style of desks has been made by a firm in this city,* that go s

* "Untersuchung. der Augen von 10,060 Schülkindern," Leipzig.

* O. D. Case & Co., School Furniture Manufacturers.

a long way towards aiding the accomplishment of one of the hygienic rules, viz., to enable the scholar to read easily and without fatigue, with the head erect, and to avoid the stooping position. The diagram shows the rack in position, and partially folded to



be packed away in the desk when not in use. It can be made at a very small cost, is provided with metal springs to keep the book in position, may be made at

any angle from the horizontal plane of the desk top, and is provided with rubber bands on its support to prevent noise in its motions when in use. They are useful for myopic adults as well as children, and can be used on the office desk and in the library, and when not in use can be folded and laid aside. It involves no new principles in its construction; it is the practical adaptation of old and well-established ones; is simple and not liable to get out of repair, and can be made at very small expense, so as to be within the reach of all.

HARTFORD, CONN., *Nov.* 1, 1875.

Reports of Hospitals.

BELLEVUE HOSPITAL.

NOTES OF PRACTICE AND PECULIARITIES OF TREATMENT.

CHRONIC BRIGHT'S DISEASE.

THE following is a summary of a plan of treatment recommended:

DIET.

This class of patients should abstain as much as possible from meat. The opinion was expressed that the excessive animal diet accounts for the great prevalence of the disease in this country. Milk should be substituted for meat, and should be associated with lime. Butter may be used; eggs if they agree, and fresh fish in the morning. Fried fats should be carefully excluded, but cream may be taken without stint. Vegetables and fruits are *always* good, but those should be selected which contain the least amount of woody fibre. Rice and potatoes, therefore, may be used, but asparagus, turnips, cabbage, and notably beans, which contain woody fibre in large quantities, should be assiduously avoided. Onions may be eaten with impunity, and are rather beneficial.

FOR THE ANÆMIA.

Iron should be administered from first to last, and by preference, the tincture of the chloride. This preparation is assimilated with difficulty, hence should not be given alone, but combined with nux vomica, and to this spirits of nitre may be added to assist the determination towards the kidneys. For example, ten drops of the tincture of the chloride of iron, ten drops of tinct. nux vomica, and one drachm of sweet spirits of nitre may be given three times a day.

Cod-liver oil increases the red corpuscles of the blood, because it is digested by the liver, and the product enters into them as an ingredient. The irritability of the stomach may make it troublesome to take, but it should be relied upon as much as in the treatment of phthisis.

TO COMBAT THE DISEASE ITSELF.

We have one agent which may be regarded as a specific against increase of connective tissue in the body, wherever the interstitial inflammation may occur, and that is the bichloride of mercury. It should be given in small doses, one-twentieth of a grain is the usual size, and should be combined with a diuretic to make it act upon the kidney. For example, one-twentieth of a grain of the bichloride, one grain of digitalis, and one grain of quinine may be given three times a day, with the result of producing a specific action upon the kidneys, and will *raise* the specific gravity of the urine.

ATTENTION TO THE CONDITION OF THE SKIN

will materially assist the embarrassed kidneys, and to do this we may have recourse to two things. If excessive œdema is present, the pressure produced shuts off the circulation to a great extent and prevents removal of the fluid by diaphoresis. It is much better then to make punctures in the distended skin of the legs, and let the water drain away at once. No apprehension need be had with reference to this trifling operation, if the limb, when the punctures have been made, is wrapped with cloths wet in a solution of carbolic acid in water, to which has been added essence or oil of cinnamon. The latter is to correct the smell of the carbolic, and is also equally antiseptic.

The second thing is, to rub the patient all over once a day with sweet oil. If extra diaphoresis is desirable, it can be best obtained by placing a blanket in an empty bucket, pouring hot water upon it, for in this way much less water is required, and then wringing it out and quickly applying it around the body and covering it with a dry blanket. The skin should be well oiled before the blanket is applied.

Such was a brief outline of the general treatment for this class of cases, and may be suggestive in certain particulars.

PROGRESSIVE MUSCULAR ATROPHY.

The interest in this case was the *limitation* of the atrophy, for it affected chiefly, almost exclusively, the extensor muscles of the thigh. There had been simply a gradually increasing weakness of these muscles going on during the past thirteen months without loss of sensibility or pain. The thigh affected, the right one, measured 17⅛ in. in circumference, while the unaffected thigh measured 19¼ in. Below the knee the muscles seemed very good. There was no evidence that the man had ever suffered from disease of the spinal cord, unless the present condition is regarded as due to some degeneration of the anterior horns, but there was no evidence of pre-existing meningitis, myelitis, etc., nor had there been any tremor or peculiar pain. There

was no evidence of peripheral paralysis, nor was there any evidence of tumor producing pressure.

CARCINOMA OF THE STOMACH.

In this instance the patient complained chiefly of pain in the hip and back, until her attention was drawn to other symptoms, when she admitted that she vomited quite regularly about an hour after each meal, if she ate anything besides gruel and whey. She was forty-two years of age; there was no hereditary taint with malignant disease, so far as could be ascertained, and she had never suffered from any sickness except the present, which began eight weeks ago. Upon examination, a tumor, about the size of a hen's egg, was found in the region corresponding to the usual situation of the pyloric extremity of the stomach. The woman did not suffer very much pain referable to the stomach, nor had she ever vomited blood or coffee-ground material.

But cancer of the stomach may be present without producing pain, and it sometimes occurs without vomiting, a fact which is often overlooked. When the cancerous disease is situated in such positions as not materially to interfere with the movements of the stomach, or is outside of where it will produce obstruction, vomiting may be absent.

EPILEPSY.

The chief feature of interest in this case was the fact that the woman, forty-five years old, had had epileptic fits once in about six weeks since she was ten years of age, and they had not given rise *to any very marked impairment* of her mental faculties. The case was perhaps an exceptional one.

DISLOCATED LIVER—CIRRHOSIS WITH ENLARGEMENT.

This was a case of liver disease of considerable interest, and the history is briefly as follows:

A male patient, æt. 42 years, German, was admitted to the hospital, May 7, 1875. The chief points in the clinical history were the occurrence of piles with frequent desire to go to stool, soon followed by bleeding from the gums, and these by loss of appetite, flesh, and strength. Some time after, he suffered from general anasarca and ascites, and finally from an attack of jaundice, but this had nearly disappeared. In June, 1875, he first noticed a swelling in his abdomen. The general anasarca had nearly or quite disappeared at times, but this had always occurred while the patient was in bed. The reason for this is probable when the condition of the tumor in the abdomen is considered. The abdomen at the time of the visit was very much increased in size, part of which was due to the presence of fluid, but in addition to that there was present a solid body, slightly nodular to the touch, sharp in outline at its lower border, which could be moved about very easily. From percussion and other means of examination, it was very evident that this body was the liver, and that it was dislocated downwards two and a half or three inches. At one time its free border had reached nearly to the umbilicus. It could be easily restored to the normal position of the liver, but returned at once as soon as the mechanical support was removed.

The vertical measurement of the organ as now situated in the abdomen was eight inches, which was one and a half inches less than when admitted to the hospital.

The question arose, Is the liver really increased in size? The increase in size was doubtful, although at first thought apparent, for the liver was not only dislocated downwards, but the normal convexity of the organ, instead of being applied to the concavity of the diaphragm, was applied to the abdominal walls, and the surface which could be measured was not the anterior border, but the convex surface.

The diagnosis of cancer had once been made, but the progress of the case had proved its incorrectness. The history was rather that of cirrhosis, and it was regarded as a case of cirrhosis of the liver, in which the liver in the *advanced stage* of this disease was *increased*, rather than diminished in size. There was no evident cause for this condition of the liver in this patient, for he had been a rather temperate man; gave no history of specific disease, and had not been subject to any of the causes which favor displacement of the liver in the female.

Progress of Medical Science.

THE QUESTION OF THE CONTAGIOUSNESS OF HEREDITARY SYPHILIS.—Dr. J. Caspary, of Königsberg, offers some facts in support of the opinion which he holds, adverse to that maintained by Dr. Carl Günzburg regarding the contagiousness of inherited syphilis. Dr. Günzburg's observations were made in the Foundling Asylum at Moscow, and were to this effect. In this asylum is a separate department to which all children are sent as soon as they show evidences of syphilis. The nurses, although warned of the risks they run, often voluntary continue to give the breast to these children after removal to this department. Thus in the years 1868, 1869, and 1870, 120 children who had hereditary syphilis were nursed by thirty-one nurses for periods varying from six months to two years; no woman nursing less than two, and some as many as sixteen different children. And yet no one of these wet-nurses contracted syphilis. Caspary maintains, with regard to this, that a single positive case of infection should have greater weight than any amount of negative testimony such as this. He finds such a positive case quoted in the critical part of Günzburg's work, from Le Barillier, of Bordeaux. It was as follows: A healthy woman, with an abundance of milk, entered the Children's Hospital at Bordeaux, as wet-nurse, fourteen days after her confinement. All the children whom she nursed continued healthy. On October 1, 1859, she was given to nurse a child, four days old, and supposed to be healthy. It developed thrush, and the nipples of the wet nurse became sore in consequence, and on the twenty-fifth day the child had syphilitic ecthyma, followed by other manifestations of syphilis, and died on Nov. 19. The sores on the nurse's nipples developed into ulcers, and she soon showed various other manifestations of syphilitic infection. Günzburg's interpretation of this case, however, is that the wet-nurse was already the subject of latent constitutional syphilis, contracted sore nipples only from the child with thrush, which became ulcers and foci of infection for the child, and were followed by the outbreak of general symptoms in the woman. Caspary also supports his own view of this case by other arguments, for which we have not space. He then gives the following case, which was in part under his own observation. A healthy married woman, of thirty-four, who had had and nursed two healthy children of her own, in the spring of 1869 took to nurse an illegitimate child, which had an eruption at

the anus and mouth, which the physician soon recognized as syphilitic. While nursing this child the woman became pregnant, noticed a sore on her breast, developed general syphilis, was successfully treated in the fifth month of pregnancy by inunction, and on March 4, 1870, gave birth to an apparently healthy child. The husband remained free from infection. The child, however, on April 14th, was found to have syphilitic roseola, and died the next day. At the autopsy the cause of death was made out as bronchitis, but in the liver was found a general increase of the interstitial connective tissue, corresponding with the description of Bärensprung. Caspary also adduces a case where a syphilitic illegitimate child, taken to nurse by a healthy married woman, communicated the disease to her through primary sores upon the nipple; and later her husband and her own child, both of whom were previously healthy, were infected. He then brings forward this argument, viz.: If inherited syphilis is not contagious, there must be such an essential difference between it and the acquired disease that the system, when infected with the former cannot be assumed to be protected from the latter. He therefore inoculated, with the secretion from ulcerated papules in a case of acquired syphilis, two twin children, who were the subjects of inherited syphilis. The result was negative in each case, as he had anticipated. It so happened that he was consulted at the same time by a previously healthy married woman, living in the same house with these children, on account of a sore on her nipple, and this proved to be a chancre, contracted by nursing one of these very twins, she having an excess of milk over what was needed by her own healthy child. The woman soon showed many of the ordinary manifestations of constitutional syphilis. He has satisfied himself of the accuracy and completeness of the case reported. In view of these facts he therefore does not hesitate to express his belief that the contagiousness of inherited syphilis is proved, and that the opposite views of Günzburg are erroneous and dangerous.—*Berl. klin. Woch.*, Oct. 11, 1875.

Nervous Cough as a Reflex Symptom of Anteversion of the Uterus.—Dr. Malachia de Cristoforis reports the following case: A lady of twenty-three had suffered for a long time from a nervous cough, having these peculiar features. It occurred only in the day-time, disappearing as soon as she lay down, whether at night or in the day-time. There would be a series of eight or ten dry coughs, followed by half an hour's quiet. She had also suffered for a year from frequent micturition and a dragging sensation in the lumbo-sacral region. Various nervines had been tried ineffectually. Her history was, that her first and only pregnancy, two years before, had resulted in an abortion at three months, and had been followed by some persistent leucorrhœa and lumbo-sacral pain, aggravated by standing and walking. On examination, the larynx, chest, and abdomen were found free from disease, nor was there any sensitive point in the spine; there were two painful points in the face, however, referable to the trigeminus. On making a vaginal examination, the uterus was found enlarged and anteverted, so that the body lay behind the pubic bone and the cervix pressed against the sacrum. These abnormal relations were remedied on her assuming the horizontal position. A double curved Hodge's pessary was introduced, which restored the uterus to its normal position, and the cough was relieved, to return, however, when, by way of experiment, the pessary was temporarily removed after a few days. After a year it was no longer required. The author's theory is, that these reflex symptoms may have arisen from pressure of the body of the uterus upon the bladder, from traction upon the utero-sacral ligaments, or from pressure of the cervix upon the posterior sacral plexus or its branches—perhaps all three reasons combined.—*Ann. Univers*, cexxxi., p. 519, *Marzo*, 1875.—*Schmidt's Jahrb.* Sept. 8, 1875.

Indications from the Fluid of Exploratory Punctures.—Dr. H. Westphalen lays down the following rules for our guidance in examining the fluid obtained by exploratory punctures of abdominal tumors.

1. The more viscid a fluid, and the more incompletely its albuminates separate, so much the more surely is it to be regarded as ovarian. 2. If no coagulation forms after such a fluid has stood for some hours in a warm place, or after its mixture with previously tested blood serum, it is highly probable that it comes from an ovarian cyst. To this there are, however, exceptions. 3. The indications derived from the precipitation by alcohol, and from the form of the coagulum, are of but little value. 4. The microscopic examination of the sediment should be chiefly for cylindrical epithelium, and in the absence of this for colloid and granular globules. 5. If these tests fail us in the case of a very thin fluid, the coagulation test is most to be depended on. The suspension in the fluid of fine particles of coagula, formed by acid, and the difficulty of clearing it by filtration, also point to paralbumen and metalbumen and an ovarian origin.—*Archiv für Gynækol.* viii. 1.—*Berl. klin. Woch.*, Sept. 27, 1875.

Puerperal Inflammation of the Ilio-sacral Articulations.—At the session of the Society of Gynæcology of Berlin, held March 16, 1875, Dr. Ebell reported that he had seen two cases of the disease mentioned. One was in a patient twenty-four years of age, with a contracted pelvis, a primipara, who was brought into Martin's clinique after attempts had been unsuccessfully made to deliver her with the forceps. She died of a low grade of inflammation of the joint, with necrosis. The second case was a woman of thirty, who was seized with severe pain in the left hip on the seventh day after an unaided delivery. Soon she could not walk, and lay on the right side with the left thigh permanently adducted and rotated inwards. There was doughy swelling of the soft parts covering the joint, and rectal examination revealed the same condition of the anterior surface of the sacro-sciatic articulation. Temperature a litte over 103° F. The treatment consisted in rest, painting with tincture of iodine, and compresses of water. Complete recovery ensued.—*Berl. klin. Woch.*, Sept. 27, 1875.

Koumys.—M. Landowski recently made a communication to the Association française pour l'Avancement des Sciences, on the value of koumys in consumption. It was stated that beside albuminoid matters, the liquid contains salts identical with those of the serum of the blood, alcohol, and lactic acid. L. cited a number of cases of consumption where koumys had been employed with the greatest success. He recommends an extract prepared as follows: Good koumys, rich in ferment, which has been deprived of caseine, is condensed in a vacuum, at a low temperature. After the evaporation of the liquid the lactic and alcoholic ferments remain, to which is then added alcohol obtained from the distillation of old koumys. Adding a little lactate to it the preparation of the extract is complete. It is a syrupy liquid, of an uncertain color, greenish white, and opaque. Forty to forty-five grammes added to one litre of milk are sufficient to change it in forty-eight hours into excellent koumys.—*Lyon Médical*, Oct. 3, 1875.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, January 1, 1876.

THE SALE OF PATENT MEDICINES.

We recently referred to the questionable course pursued by pharmaceutists in virtually declining to abandon a profitable traffic in patent and irregular medicines, on the ground that they were in popular demand. We then, very pertinently as we thought, propounded the inquiry whether, under such circumstances, pharmacy could strictly be considered a profession, or whether it should not rather be classed among the commercial pursuits, inasmuch as the sale of such articles for mere pecuniary purposes savored more of the characteristics of trade than of high professional duty. We are glad to find, in the columns of the *American Journal of Pharmacy* for December, that the remarks we then made have not escaped the notice of the pharmaceutists of the country, almost all of whom have been guilty, in greater or less measure, of the practices referred to. We find our remarks not only honored with editorial notice, but also with a special paper offered at a meeting of the New York Alumni Association of the Philadelphia College of Pharmacy, and which we republished in our last number. Both these articles seem to confirm rather than refute the main positions we then advanced. The point in our own editorial of October 9th, which seems especially to have suggested these replies, is the allusion we at that time made to "over-sensitiveness of the pocket-nerve," as the chief motive power influencing the actions of the pharmacists in their wrong-doing. In the paper referred to, there is no contradiction of this insinuation, but rather an apology for the false status of pharmacy on the subject. Our criticism on their course is, however, said to be "most unkind and unjust to the respectable minority of the profession [of pharmacy], who regard this feature as a nuisance, and would gladly aid in its discontinuance." We do not doubt that there are many apothecaries of excellent principles who do see the impropriety of this irregular traffic, but men must be judged by their deeds and not merely by their professions. What is this "respectable minority" actually *doing* to effect the discontinuance of a practice which is acknowledged to be fraught with evil? Absolutely nothing, so long as the sale goes on unrestricted at their counters, and patent and special medicines are meted out to every indiscriminate applicant. We confess to an unlimited faith in the adoption of radical measures for the suppression of radical wrongs; we consider therefore that a bold front on the part of representative State and national pharmaceutical associations will have the effect of strengthening the hands of this respectable minority; and of guiding into paths of propriety the great majority, who, in their practices at least, are not so respectable.

But the author of the paper in the *Journal of Pharmacy*, and the editor of the latter, who is also Permanent Secretary of the American Pharmaceutical Association, are strenuous advocates of half-way rather than of extreme and thorough measures. The former maps out a line of duty for pharmacists to follow that is beautiful in its simplicity, and would be admirably practical in its working, if druggists were not human in their weaknesses, and were absolutely perfect as patterns of self-denial in their pecuniary dealings. When the millennium arrives we shall expect every pharmaceutist to frame his course of action according to the following standard there proposed: "His [the pharmaceutist's] duty is: Never to recommend a patent medicine, keep no advertising matter setting forth their merits, allow no display of signs and show-cards, etc., in his shop; and, if possible, as it often is, keep such nostrums out of sight of the public, to supply only on customer's order, provided he cannot prevail upon him to consult a physician, or to try some remedy which he shall prescribe." We presume by "he," is meant the apothecary, who would thus substitute one wrong for another by trying to induce a customer not to purchase a nostrum of whose composition both are ignorant, and then violate his own code of ethics by himself prescribing for the patient. The fancy picture of an apothecary attempting to argue with a purchaser on the impropriety of his using medicines which are kept regularly in stock for any caller, and employing all his powers of gentle persuasion to induce the patient to consult a medical man, may have its counterpart in actual practice in one case in a thousand, but in the other nine hundred and ninety-nine cases the buying and selling of irregular medicines is a much simpler and more monetary process. We believe, however, that there is some show of conscientiousness evinced in the proposed hiding from sight of medicines, of which he is confessedly ashamed to be the seller, and for this much at least let us be thankful. The editor of the journal quoted believes that the best way to abate a nuisance is to educate the public; on the contrary, experience in measures of sanitary relief of other kinds

has clearly proven that while the process of educating the public is being discussed, the offence still endures in all its original enormity. The pharmacist, in the case in point, is really responsible for the spreading of the very nuisance which he professes a desire to do away with; a course of apparent duplicity of action that tends rather to perpetuate it. As long as the nuisance remains, the moral atmosphere cannot escape contamination. But why adopt the editor's suggestion and attempt to educate the public at all, if it be true, as the author of the other paper flatly asserts, that the nostrum-buying public are not, as we had represented, the "non-educated portion of the community," and that "among the patrons of certain nostrums are numbered many of the best educated people, notably the clergy, who have an unaccountable propensity for endorsing nostrums."

After all, it is the question of the pecuniary effect of the sale of these medicines that is the stumbling-block in its solution. All respectable pharmaceutists agree that it is an evil; but some of them differ with us in the mode of discontinuing it. It is a source of great profit, even if it be a moral wrong; and it is probable, therefore, that apothecaries can never be unanimous in any plan for its abandonment. It is none the less an evil because physicians sometimes prescribe these proprietary remedies; nor, does it justify a wrong on the part of the apothecary in selling them that his refusal to do so "would only send the customer to the next drug-store," or lead to the establishment of agencies for the tabooed preparations at other places of business. Let him be just and honorable to himself and the public; he has no further responsibility, be the effect what it may. But a determined opposition to the traffic on the part of the profession of pharmacy for so we would wish to call it—would be likely to induce the right-thinking portion of the public to reflect that there must be some valid reason for all this self-abnegation. As it is very desirable that pharmacists and practitioners should be in practical accord, we shall be glad to hear of any feasible plan of conference between pharmaceutical and medical conventions that will secure greater stringency of legislation, and suggest satisfactory methods of remedying the evils alluded to.

THE PRESBYTERIAN HOSPITAL AFFAIR.

We are officially informed that the *Presbyterian Hospital*, on the 13th December, contained forty-five patients, that the managers were under the necessity of opening two more wards, and that there were also *eleven candidates* for the vacant places in the medical staff. There are then eleven men at least who advocate the principle of being dismissed from a hospital staff without cause, and who are willing to trust themselves to the tender mercies of a board of managers who have defiantly outraged all notions of even ordinary justice. If this is the way to uphold the dignity of our profession we have been wrong from the beginning, and entirely misinterpreted the popular sentiment.

THE SECULAR PRESS ON MEDICAL TOPICS.

It is amusing to see the audacity with which the secular press tackles abstruse questions in scientific medicine. Not content with the exercise of its influence in the direction of educating the people on health matters within the comprehension of all, it goes so far beyond the latter point, that even the educated physician stands aghast at the profundity of its judgment. But, after all, this is in keeping with a self-appointed censorship of all the doings of mankind, the medical profession included. If a new remedy is reported, an opinion must be expressed upon it: the same with some new method of treatment, or some new medical doctrine, and it is done in that authoritative way which is ridiculously refreshing On questions of medical ethics we must look to them for guidance, and, refusing to accept their right to dictate, we must be ridiculed into submission. Lately we had a discourse on vivisection, which, in the novelty of the views advanced and the soberness of the advice offered, was more than usually entertaining. Just now the topic of criminal insanity is occupying the attention of one of these medical authorities, and after reading what he has to say upon the Staudeman case, we are filled with regret that he was not consulted by the lunacy commissioners before they made their report.

THE LATE DR. KRACKOWIZER.

So seldom is justice done to the memory of the great and good men in medicine, that when there is an exception to the rule of burying their deeds with their bones we make due notice of the fact. No more appropriate exception could have been made than in the case of the lamented Krackowizer, an elaborate and graceful memorial of whom has lately been published.*

If our lamented friend could in his natural modesty have supposed that his life deeds were worth recording after he was no more, he could scarcely have selected more judicious and eloquent biographers than his old friends Drs. Jacobi and Althof, and the Hon. Carl Schurz. The addresses of these gentlemen are contained in the volume before us: the one by Dr. Jacobi, delivered before the Academy of Medicine; the other two at the Memorial meeting in Steinway Hall, October 22. At the same meeting were also addresses by E. F. Hall, Esq., and Dr. F. Zinsser. These, together with the resolutions passed by the different societies of which the deceased was a member, and the various public institutions with which he was connected, make up the contents of a volume which cannot fail to be acceptable to all who knew the deceased. The life

* In Memory of E. Krackowizer, N. Y. G. P. Putnam's Sons, 1875. 8vo. pp. 68.

sketch by Dr. Jacobi is particularly eloquent in loving admiration of his old and well-tried friend—and yet the whole story is not told.

Reports of Societies.

NEW YORK MEDICAL LIBRARY AND JOURNAL ASSOCIATION.

Stated Meeting. Dec. 17, 1875.

DR. E. G. LORING, PRESIDENT, IN THE CHAIR.

NÆVUS.

THE discussion upon the above subject, it being a special order, was opened by DR. BAYLIS.

The doctor gave a brief *résumé* of the ordinary descriptions given to the different varieties of this affection, and then turned the discussion in the direction of treatment, as probably being the more interesting part of the subject. To induce atrophy of these growths resort has been had to a variety of measures, such as compression, astringents, acupressure, ligature; different measures for exciting inflammation in the tissue, such as setons, puncture, laceration, incision, insertions of sponge, injections of stimulant solutions, puncture with probe coated with nitrate of silver, vaccination, ligature in different ways, cauterization, etc., etc.

DR. GARRISH regarded needles heated to a white heat as the best means for treating nævi of moderate size which had a solid base. He had treated one case successfully by vaccination, when the tumor was situated over the anterior fontanelle.

DR. R. W. TAYLOR remarked that the nævus araneus, or that variety in which there is a central red point, from which little vessels radiate in all directions, especially liable to occur about the nose and upper part of the cheek, can be very easily destroyed and cured by the use of the electric needle.

Again, that variety, or subcutaneous form, of nævus which is sometimes found in the cheek, and simulates in feel a fatty tumor, can usually be benefited by this method of treatment. In the treatment of this variety he had hesitated with regard to injecting ergotine or other substance with the view of producing coagulation of the blood, for fear that subsequent trouble might be experienced in the way of cerebral embolism. The common red-hot needles give so much pain that the patient flinches when they are introduced, and then they are cooled before they have time to reach the proper part of the growth. In this respect, then, electric needles are far superior. They are easily applied, and the subsequent results in the way of cicatrices are almost nothing, for the puncture closes rapidly, and the spot can scarcely be recognized where the needle was introduced. Where the ordinary needle has been employed the instances are not few in which minute keloid growths have appeared in the cicatrices. Dr. Taylor also referred to a case of traumatic nævus occurring upon the nose, and believed such an origin to be uncommon.

DR. A. C. POST remarked that the most important distinction to be made in this affection is between the vascular and the pigmentary varieties. Stains of the skin are mere matters of personal blemish, are without tendency to increase, and cause no trouble aside from the discoloration.

The superficial nævi of the vascular variety are easily cured by either of the prominent methods of treatment in ordinary use. When the surface of the nævus is flat it can be treated quite satisfactorily by brushing it over with nitric acid, just enough to produce a slight superficial cauterization.

If there is no tendency to spread, the nævi, perhaps, may better be left without treatment, but when they manifest a tendency to spread, treatment should be at once introduced.

If needles are employed, blunt-pointed ones should be selected, for it is the chemical action of the heat that we wish to secure, and not the mechanical action produced by a sharp needle. The doctor exhibited an instrument devised by a former graduate of the University Medical College, which consisted of six needles, each about the size of a fine knitting-needle, and without points, inserted in a handle, and about half an inch from their outer extremities they passed through a bar containing two rows of holes. Each row contained three needles, and the perforations were separated nearly one-fourth of an inch in each direction. By using this instrument the operation can be greatly facilitated, and the heat is better retained in this bundle than can be done by a single needle.

When the tumor is quite prominent the most desirable method of treatment is by means of the ligature. The tumor may be ligatured in halves, or more divisions can be made, according to circumstances.

The deeper subcutaneous nævi, composed largely of veins, the doctor looks upon with some apprehension as regards ultimate results obtained by treatment.

Reference was then made to one or two cases which had been treated for him by Dr. Beard, of this city. The treatment was by means of electrolysis, and good results were obtained. The three methods of treatment for nævi which Dr. Post recommended were the needles, the ligature, and electrolysis.

DR. F. P. FOSTER gave the history of his own case, and exhibited the spot where the nævus was situated. It was upon the forearm, was congenital, was diagnosticated as a fatty tumor by Dr. Bigelow of Boston, who proceeded to an operation for its removal. When a long incision was made, the mistake in diagnosis at once became evident.

Dissection was then made around the base of the tumor and about thirty vessels ligatured, which contributed to its vascular supply. After a tedious and alarming illness, during which the question of amputation was raised, he made a good recovery.

DR. B. F. DAWSON remarked that he was well convinced that the treatment of nævus should be restricted to two methods—namely, electrolysis and treatment by the use of the galvanic cautery. The doctor objected to the use of needles, because they cannot be heated sufficiently intense to retain their heat until they can be thrust into the tumor to the depth desired. Another objection is the discoloration of tissues produced by the oxidation of the needle. Objection was also made to the use of any agent which coagulates the blood, hence all caustic applications and injections of astringents, stimulants, etc., etc., were excluded. The favorite plan of treatment employed by Dr. Dawson is that by means of the galvanic cautery, and to use this in the most successful manner a few precautions are necessary. For the superficial nævi all that is required is such a degree of heat as will radiate into the deeper tissues from the surface. If too intense heat is used, it will be removed with the needle or knife, or platinum strip, whichever may be em-

ployed, and the appearance of the nævus will subsequently be the same as it was before the application, whereas if the platinum is heated only to a dark-red color, destruction of tissue will not be produced, and the vessels will be made to shrink on account of the effect produced by the radiated heat. For all superficial nævi of moderate size a single thorough application is all that is required to effect a cure. In treating the subcutaneous tumors a white heat becomes necessary, in order that the knife or needle shall retain sufficient heat to be of service when it has reached the deeper tissues.

With regard to nævi having large surfaces, portions may be destroyed at different times, and considerable portions will also be destroyed by the moderate inflammatory action which follows the operation. Dr. Dawson also related a case where the nævus was situated directly over the anterior fontanelle, and was treated successfully by means of this method. The dangers were recognized, and a corresponding degree of care exercised in performing the operation.

The point specially insisted upon by Dr. Dawson was, that the galvanic cautery did not in any true sense produce a coagulation or thrombosis in the vessels like that produced by an astringent injection, but rather a clot which becomes rapidly organized and a shrinking in the calibre of the vessels which remains permanent, and that this can be effected without destruction of tissue. If too hot a needle or knife from the galvano-cautery is introduced into tissues there will be as much hemorrhage as after the use of a cold sharp knife.

Dr. Allen spoke of the galvanic cautery as the most serviceable means at our command for the treatment of nævus. The ease with which it can be applied, the rapidity with which the operation is performed, and the almost total absence of severe inflammation following it, strongly favor its adoption.

The doctor then referred to three cases occurring in young children; two upon the head and neck, one upon the wrist, and all in active growth.

Those upon the head and neck were cured by a single application. That upon the wrist required a little more prolonged application. In the superficial variety, all that is necessary is to place the platinum, moderately heated, in contact with the surface, and allow it to remain sufficiently long to be certain that the heat has radiated to the tissues below.

Dr. Andrew H. Smith referred to a variety of nævus which has a fibrous capsule, and the contents can be enucleated almost as easily as an encysted tumor can be removed. Perhaps in this variety enucleation would be the best treatment. The doctor also spoke of the nævi which are sometimes seen at the alæ of the nose, and appear to involve the entire thickness of the alæ. He inquired whether this variety can be treated by the use of the galvanic cautery in the same manner as when the nævi are situated in other localities.

Dr. Dawson replied that such nævi could be treated by this means equally well as those found in other situations.

Dr. Messenger mentioned a case of what is known as the port-wine nævus, that fell under the care of a quack, who nearly cured it with a sun-glass.

Dr. Piffard remarked with reference to the solar cautery, that he had found it applicable in the treatment of lupus and chancroids, and could not see why it might not be serviceable in the treatment of nævus. While applying this cautery, it is well to protect the eyes from the brilliancy of the light by wearing colored glasses, else the operator will not be able to determine the *exact* outline of the cauterization. With a little practice a line no more than one-sixteenth of an inch in breadth can be obtained with considerable ease. The doctor referred to a case of nævus situated over the anterior fontanelle, in the treatment of which he assisted Prof. Darby. The galvanic cautery was employed, and the result obtained was satisfactory as far as applied. The nævus was of some size, and only a portion was destroyed at the first operation.

Dr. Ward referred to cases where he had effected a satisfactory cure by the use of the common hot needles. The result desired in the use of the cautery is the production of a clot in the vessels, which shall rapidly become organized, as after a ligature, and be followed by permanent atrophy. By the use of the galvanic cautery localized coagula are not produced, but coagulation over the entire tumor is produced at once; hence there is no *vis a tergo* left in the tumor to drive fragments of the thrombus forward. The doctor recommended the galvano-cautery, but at the same time justified the use of the actual cautery by means of the hot needles or hot iron when no other apparatus can be obtained. He objected to the practice of injecting coagulating substances into nævi, for the reason that great risk is taken with reference to the subsequent development of embolism.

The hour of ten having arrived, the Association was adjourned by the President.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, December 16, 1875.

Dr. S. S. Purple, President, in the Chair.

THE TREATMENT OF PERITYPHLITIC ABSCESS

Being the subject for discussion, Dr. Weber related in brief the histories of three cases. The first occurred in 1869, in a boy æt. 18 years, and presented the ordinary symptoms of this affection. Dr. Willard Parker, of New York, had reported his case and method of operation in the year 1867. Dr. Weber performed his operation in the same manner, and made a long incision over the region of the suspected abscess, carefully dissecting through one layer after another of the abdominal parietes until the fascia transversalis was reached. At this point, a careful search for fluctuation was made, but none being detected, it was deemed unadvisable to proceed further with operative measures. Accordingly a drainage tube was inserted, and the wound closed, except the central portion. Only a short time elapsed before the abscess ruptured, and upon the second day a foreign body, a hard lump of fæcal matter, was found outside upon the dressing. The drainage tube was retained for a short time, and the boy soon made a perfect recovery. In this case the operation was performed upon the *seventh* day, and scarcely any connective tissue was discharged from the wound.

Dr. Weber's second case occurred in a young man æt. 25, who was quite fleshy and robust. The attack was sudden and violent. There seemed no difficulty in diagnosis, and the case was treated with opium fomentations, etc., until the *eighth* day, when, after being able to distinctly recognize a tumor, it was determined to perform the operation for evacuating the contents of the supposed abscess. Accordingly an incision about four inches in length was made through the abdominal parietes, and extended down to the fascia transversalis. At this point, as in the preceding case, the fascia was palpated in search of fluctuation, when suddenly the wall of the abscess was perforated, and a

large quantity of fetid pus escaped. The case did well for a time, and within two or three days an orange seed covered with fæcal matter was found upon the dressing. After a time, considerable connective tissue was discharged from the wound, and it was at least four weeks before union began to take place. In the fifth week the patient became the subject of traumatic erysipelas, which involved the right side of the trunk, invaded the wound, separated the lips, and delayed final union for a very considerable length of time. Union, however, finally took place, but the cicatrix seemed so insecure, that the doctor thought it advisable for the patient to wear a truss as a guard against the occurrence of ventral hernia. Hernia has not occurred, and the man wears the truss without serious inconvenience.

Dr. Weber's third case occurred in a tall lank individual who had syphilis, and was 28 years of age. He was suffering from *secondary* manifestations, mucous patches, etc., at the time of the attack, which came suddenly in the night and developed the peculiar symptoms of the disease. Leeches, fomentations, opium, injections of warm water to relieve flatulence (tympanitis was marked), beef-tea, milk, and stimulants were the agents resorted to in the early treatment of the case. On the *ninth* day it was determined to perform the operation, and accordingly an incision, as in the second case, was made through the tissues over the tumor down to the fascia transversalis. Here again, while palpation was being made, the finger broke through the wall of the abscess and a large amount of fetid pus evacuated. In this case the amount of suppuration following the operation was very large, but no foreign body was discovered. At the end of the second week there was a sudden and marked aggravation of symptoms, characterized by pain, dysuria, restlessness, tympanitis, acceleration of pulse, elevation of temperature, etc., etc. These symptoms were relieved as much as possible by the use of opium, the catheter, fomentations, injections, etc., etc., until at the end of the third or early in the fourth week the patient began to pass pus in considerable quantities with his urine, and this continued for about a week. The wound in the abdominal parietes during this time continued to discharge freely. With the discharge of pus by the urethra there also came relief from all the severe general symptoms.

In the fifth week the doctor was again summoned in the night on account of a second aggravation of symptoms. The constitutional disturbance was about the same as before, and was relieved as far as possible by the use of the same measures. At the end of about a week the patient passed a large quantity of pus by the rectum, and again the patient felt relieved. Finally, about the eighth week, the external opening had closed, but the cicatrix presenting the same weak insecure appearance. As in the second case, it was recommended that a truss be worn as a protection against the occurrence of hernia. In this case also hernia has never been developed. The question which the doctor now raised for himself was, How shall I perform the operation in the future? He formulated his answer thus: there are, undoubtedly, cases which admit of first introducing a fine canula or needle into the abscess through the abdominal walls, and thus make the instrument a guide for the subsequent incisions, according to the method of operative procedure described by Dr. Gurdon Buck of this city.

Perhaps, however, the incision enables the operator to be more sure of fluctuation beneath the fascia transversalis, and that is really the great point of importance in the operation. An incision four inches in length the doctor regarded as amply sufficient. Dr. Weber emphasized another point, namely, that in another case he shall treat the wound after the antiseptic plan of Lister, or any other well approved plan, for the purpose of destroying the atmospheric germs with which it may become poisoned. The plan of operation by first making an explorative puncture was not objected to by Dr. Weber, and perhaps there may be less liability to subsequent development of hernia than when a free and somewhat extended incision is made through the abdominal walls. In any event, he objected to delaying the operation beyond the eighth or ninth day.

Dr. Fordyce Barker remarked that he was not able to speak of this disease as an idiopathic affection, but his observations had been confined almost exclusively to those cases which have been associated with the puerperal state. He had seen a single case associated with typhus fever.

In this connection, the doctor referred to the well-known tendency, in certain epidemics of puerperal fever, to the formation of abscesses in various regions of the body. In some epidemics, the occurrence of such abscesses seems to be the most notable lesion, and for this reason perityphlitic abscesses are seen not infrequently.

Reference was here made to the great difficulty of diagnosis of this affection in puerperal women, because of the obscurity of the symptoms. It is difficult to determine whether we have to deal with pelvic peritonitis or pelvic cellulitis, or metritis, or phlebitis, and it is only by the most careful study of the clinical symptoms, accompanied by the most careful and judicious physical examinations, that a correct differential diagnosis can be made.

Certain points in diagnosis observed by Dr. Barker may be mentioned. Tumefaction of the abdomen is especially liable to be absent in women sick with puerperal diseases affecting this region.

Where this form of abscess has been the primary manifestation, he had not found that high degree of temperature and rapidity of pulse, perhaps none of the symptoms except tenderness upon pressure, which commonly accompany puerperal peritonitis. The temperature does not usually rise above 103 or 104 F.; the affection is ordinarily of slow development, and the pulse may reach 108 or 110.

There is not that amount of constitutional shock commonly seen in connection with metritis and phlebitis.

Vomiting is a prominent symptom. Difficulty of micturition has been present in every one of his cases. *Absence of rigors* is a notable peculiarity. We have been accustomed to regard it as almost a necessity to have rigors or chills developed during the progress of purulent formations, but in all these cases which had fallen under his observation this symptom had not been present.

The doctor referred to the fact that he had seen several cases where swelling of the limb followed the development of an attack that was to terminate in the formation of a perityphlitic abscess, and the cases were mistaken for phlegmasia alba dolens. But the appearance of the limb is something entirely different when the swelling is developed as the result of the abscess, from that presented when the swelling is the result of phlebitis. For there is, in the case of abscess, an absence of the glistening skin, tenderness upon pressure, and the œdema so commonly present in the *alba dolens* after the first three or four days. To the practised eye the appearance of the limb in these two conditions is entirely distinct.

Some of Dr. Barker's cases died of peritonitis ex-

cited by the presence of the abscess; some from exhaustion incident to the profuse suppuration. In some cases perforation occurred into the bladder and bowel, and in one case an external opening formed. One case recovered without operative interference. A number of cases recovered after an external opening was made. In one case of perinephritic abscess which the doctor mentioned, when an opening was made, the kidney could be distinctly seen and felt, and recovery took place. One case was related in which the aspirator was used and about one ounce of pus withdrawn, the patient placed upon large doses of quinine with the view of arresting cell-production, and the patient recovered.

Dr. Barker inquired of Drs. Buck and Weber with reference to the occurrence of rigors in their cases.

In Dr. Buck's last case there was a slight shiver lasting only a few minutes in the earlier part of the attack; and in Dr. Weber's cases there was a rigor in the first, but not in the second and third until the succeeding troubles were developed.

Dr. Buck remarked regarding the occurrence of hernia, that in his first case a sufficient length of time had elapsed to determine whether the tendency existed or not, but that it was absent, and there seemed to be no special liability to its production.

He further enforced the proposition that the *circumscribed sensitive* point indicates the exact location of the abscess, and that elevation or redness of surface were not necessary to a diagnosis, nor should the presence of a tympanitic percussion-note over the tumor deter from the operation. The resonance can be explained by the development of gas in the cavity of the abscess, thus giving rise to tympanitic resonance where formerly dulness was present. The doctor also considered it important to avoid wounding the abdominal parietes to any greater extent than is absolutely necessary.

A small canula No. 1, bougie scale, can be introduced with perfect safety; for if it should penetrate the intestine no harm will follow.

He further alluded to the fact that it was Dr. Hancock, of London, who first performed the operation in the year 1848; and that Dr. Willard Parker revived it in 1867.

The question was raised by a member, Why not operate earlier and introduce the needle of the aspirator, say on the third or fourth day? What harm can be done? Would it not be justifiable?

Dr. Weber expressed the opinion that nothing is to be gained by interference before the tumor can be distinctly felt, at which time adhesions have probably taken place. He disapproved of any operative interference whatever before the sixth or seventh day; possibly in some cases by the fifth.

Dr. Buck corroborated the opinion of Dr. Weber regarding too early operative interference.

The Academy then adjourned.

Uterine Vaccination of a Lamb.—In 1851 a flock of ewes was vaccinated by Mr. Sylvain, V. S. Amongst them several were pregnant. On the twentieth day following the operation, a lamb born of one of the vaccinated ewes presented on the inside of the left thigh the three marks which had been made on the mother, at the same place and on the same leg, when the lamb was yet a fœtus. She had been delivered twelve days after vaccination, and on the twentieth day the pustules were in both, ewe and lamb, in the period of desquamation.—*Recueil de Médecine Vétérinaire.*

Correspondence.

"MILK OF MAGNESIA."

To the Editor of The Medical Record.

Sir:—There is a proprietary preparation with the above title for sale in the shops, which has given rise to considerable discussion. On the one hand, it is claimed on the label that it consists of "a simple mixture of pure hydrate of magnesia with pure water." On the other hand, those who have tried to mix hydrate of magnesia with water, without the intervention of gum, sugar, or other intermedium, have completely failed, and are ready to assert that the preparation is not what it purports to be.

Whatever may be the "new process" to which the proprietor lays claim, it is certain that a permanent "mixture of pure hydrate of magnesia with pure water" may be easily prepared by precipitating a solution of Epsom salt with caustic potash or soda, and removing the resulting sulphate by repeated washings, decanting the clear liquid in the upper part of the vessel each time, and adding a fresh quantity of water. The last decanting will leave a milky fluid, consisting of the loose flocculent precipitate of hydrate of magnesia, with just enough water to fill the interstices. The apparent *suspension* of the magnesia is owing to the loose and bulky character of the precipitate, as is shown by the fact that if the latter be collected on a filter, dried and reduced to powder, it will no longer mix with water, but will sink promptly to the bottom.

The fluid obtained as above described seems to be identical with the so-called "milk of magnesia," referred to above. It has exactly the appearance of milk, and when a very little sugar is added it resembles it closely in taste. This makes its administration extremely easy, while being in a liquid form it acts more promptly and uniformly than the powder, and we should suppose would be less likely to form concretions in the intestines.

It is an exceedingly useful and convenient preparation, and ought to be kept by every druggist in the place of the patent article, which is sold at an extortionate price.

Andrew H. Smith, M.D.

110 E. 38th St., New York, *Nov.* 24, 1875.

RECOVERIES FROM GUNSHOT WOUNDS.

To the Editor of The Medical Record.

Sir:—In the perusal of some of the late numbers of your journal, I have read with a deal of interest the history of a number of cases of remarkable recoveries from terrific wounds, and although not able to give you a case in which the anatomy had been as badly abused as described in at least one of your published instances, yet I am disposed to contribute my mite to the collection of remarkable recoveries from gunshot wounds.

Every one who participated (in either army) in what was called the "Banks Red River Expedition," during our late "unpleasantness," will remember the exceedingly rapid retreat which was made by that column; and also the fact that most of the Federal wounded, who were at all badly hurt, died either on the field of battle, or fell into the hands of the Confederates, and eventually died from lack of proper attention. The

history of the case that is about to be related is, therefore, more than ordinarily interesting, from the fact that the patient was in some manner carried along with the retreating troops, and recovered from his injuries, measurably at least, without any other hospital advantages or surgical attendance than a retreating army could give when it had been completely routed.

The description of the case is transcribed from an old pension docket, made while I was examining-surgeon for pensions at Lancaster, Ohio, in 1868 and 1869, and is taken from the last examination made by me, which was on September 1th, 1869, and was made in an exceedingly hurried and careless manner. I have not seen the veteran since, but it is fair to presume that he is still living, and engaged in the pursuit of his ante-bellum occupation, namely, that of a cobbler. In a visit paid to the vicinity of his former home, a few weeks ago, I made some inquiries as to his whereabouts, and was informed that, several years before, he had "gone west," and was, when last heard from, flourishing in that country, wherever it may be. I give the whole entry as it stands on the book, and perhaps the narrative may attract the attention of some one who has seen the subject since I have, and who may be able to add some important particulars thereto.

"Re-examined Sept. 4th, 1869.—John B. Goman, late a private in Co. A, 11th Regiment Iowa Volunteer Infantry, is inscribed upon the roll of the Columbus (Ohio) Agency. He was wounded at the battle of Pleasant Hill, Louisiana, during the Banks Red River Expedition, seven times, as follows:

"*1st.* Produced by a splinter driven from a tree by the bursting of a shell; struck the left side of the neck below the ear, and between the sterno-cleido mastoid swell and the ramus of the jaw. The results of this wound have been an immense cicatrix, total loss of hearing in the left ear, and partial anchylosis of the jaw.

"*2d.* Produced by a musket ball, which penetrated the left thigh at a point seven inches above the patella, on the inner margin of the rectus muscle, passed upward and outward, and emerged at the point where the sensor vaginæ femoris becomes tendinous, and beneath the vestus externus. The results of this injury are a large and constricted cicatrix.

"*3d.* Caused by a musket ball, which penetrated the left thigh over the belly of the rectus muscle, passed directly backward, and emerged at the upper angle of the popliteal space, fracturing and comminuting the shaft of the femur outrageously. The results of this wound are deeply depressed cicatrices, and a large callus at the point of union in the bone.

"*4th.* Caused by a musket ball, which entered the outer side of the left thigh, at a point over the origin of the vastus externus, passed downward, inward, and backward, and yet remains embedded and encapsuled beneath the inner condyle of the femur, and very near the knee-joint. The results of this wound are deep cicatrix, and partial anchylosis of the left knee-joint.

"*5th.* Caused by a musket ball, which penetrated the inner side of the left leg, at a point six inches above the internal malleolus, and over the inner edge of the tibia, and was extracted from the same place, having spent its force. The result of this injury is a very large and painful cicatrix.

"*6th.* Produced by a musket ball, which entered the left leg at a point one inch behind the point of entrance of the fifth wound, passed downward and outward, and now remains encapsuled in the interosseous space, and near the ankle-joint. The results of this wound are the usual cicatrix, partial anchylosis of the ankle-joint, and intense pain on movement.

"*7th.* Caused by a canister shot, which penetrated the posterior surface of the right thigh at the upper angle of the popliteal space, passed downward and outward, producing a compound fracture of the femur in its course, and emerged at the point of the commencement of the tendon of the long head of the biceps, about three inches above the external condyle of the femur. The results of this wound are a very large cicatrix, a considerable malformation from improper union of the fracture, and noticeable anchylosis of the knee-joint. He cannot walk except with great pain, and can do no work except in a sitting posture. The case has in no wise improved."

After this description, who shall say that the enemy did not obey the orders of their commanders to fire low? I have no doubt, judging from the evidence orally given by Goman, and the nature of his wounds, that it must have literally *rained* missiles during the battle of Pleasant Hill. I inquired of him as to whether at the time he was wounded, or at any time since then, he had been able to decide which one of his injuries brought him to the ground. He replied in substance: "I received *all* the wounds at the same instant, and went down all in a heap at once. I tell you it just *hailed* bullets there, and a fellow couldn't get away from them, either."

I am sorry to be unable to give a more detailed narrative of the case, but on the whole the case can be reasonably classed with the late one in THE RECORD, which was the subject of twelve wounds.

Very respectfully,

JOSEPH R. BECK, M.D.

15 EAST WASHINGTON ST., FORT WAYNE, INDIANA.

CHANGES IN THE PUBLIC SERVICE.

ARMY.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from Dec. 19th to Dec. 24th, 1875.

BARNETT, R., Assistant Surgeon.—Assigned to temporary duty at Jackson Barracks, La. S. O. 232, c. s., Department of the Gulf.

COWDREY, S. G., Assistant Surgeon.—Assigned to duty at Jackson Barracks, La. S. O. 232, Department of the Gulf, Dec. 18, 1875.

TORNEY, G. H., Assistant Surgeon—Assigned to duty at Post of Pineville, La. S. O. 232, c. s., Gulf.

WASHINGTON, Dec. 23, 1875.

The following decision as to the status of Acting Assistant Surgeons in the army is announced: Acting Assistant Surgeons are entitled to the same protection in their positions, also to the same respectful subordinate conduct, and to the same military courtesy from enlisted men, as would be the case if they were commissioned officers. They are placed in the position of commissioned officers so far as relates to their duties as surgeons by the United States Government.

MR. ACTON, a London physician, who is known by his writings on the generative organs, prostitution, and allied subjects, died suddenly on the 7th of December of syncope, from fatty heart.

DR. G. B. OWENS, J. P., has been elected Lord Mayor of Dublin, Ireland.

Medical Items and News.

The "Mass Meeting" Resolutions.—Information Wanted.—"Citizen" sends us the following:—"*Dear Sir:* It will be remembered that at the 'mass meeting' (so-called) of the profession, held on Nov. 30th, that after the passage of the 'resolutions,' Dr. Gillette's motion, 'that the resolutions be printed and a copy be sent to the secretary of every hospital and dispensary in the city.' was adopted. Now, I ask for information why this resolution has not been carried out? I state, by authority, that the Governors of the New York Hospital are particularly desirous that the 'resolutions' should be laid before them at their next monthly meeting."

New York Academy of Medicine.—The following donations have been made to the library of the Academy since Nov. 24, 1875:

From Dr. Elisha Harris—A volume of the "Medical Papers of the U. S. Sanitary Commission Memoirs," edited by Prof. Austin Flint, M.D.; Vol. I. of Public Health Papers of the American Public Health Association; a filed series of the Weekly Statement of the Bureau of Vital Statistics of the City of New York.

From the Board of Health of New York—Fourth Annual Report of the Board of Health of the Health Department of the City of New York, May 1, 1873, to April 30, 1874.

From Dr. H. T. Banks—The American Dispensatory, edited by J. R. Coxe, M.D., 1823.

From Mr. I. F. Wood—Twenty miscellaneous pamphlets on medical subjects, and ten numbers of medical journals and reports.

From Trustees of the Johns Hopkins Hospital, Baltimore, Md.—One volume entitled "Hospital Construction and Organization," 1875.

From Dr. James R. Leaming—A volume on surgery, by Ambrose Paré, printed in Dutch in 1655, formerly owned by Dr. Gerardus Beekman, who was a prisoner of war in the American Revolution, and was released to do duty because of the small number of surgeons.

From E. D. Hudson, Jr.—The Materia Medica of Cullen, 2 vols., Edinburgh, 1789; Cours d'Anatomie Médicale, Portat, 5 vols., Paris, 1803; Anatomie Général, by Bichat, 4 vols., Paris, 1821; Œuvres Chirurgicales, by Dissault, 3 vols., Paris, 1813.

From Mr. Juan Cimeros—Medicine Legale, by J. L. Casper, 3 vols., Paris, 1862.

From Dr. Francisco Dichiara, Corresponding Fellow of the Academy—A Pamphlet on Electricity in Surgical Diseases.

From Dr. Sell—Physician and Pharmacist, Nov., 1875.

The following works by Dr. Austin Flint were presented by him:

Essay on Conservative Medicine and Kindred Subjects, 1874; A Practical Treatise on Physical Exploration of Chest, 1866; A Practical Treatise on Disease of the Heart, 1870; a Volume on Phthisis, 1875; A Treatise on the Principles and Practice of Medicine, 1873.

Dr. P. De Marmon, of King's Bridge, N. Y., is spending the winter at St. Augustine, Florida, on account of impaired health, consequent upon an attack of pneumonia last spring.

The Manual of Thermometry, by Dr. E. Seguin, of this city, has been translated into Italian by Dr. Alberto Zeri. This is another evidence of the appreciation of American labors abroad.

The Vivisection Question in England.—*The British Medical Journal* says that the Committee of the Association for the "Promotion of Human Treatment of Animals," have resorted to the plan of placing in the hands of young ladies, papers for the signatures of their friends, and remarks: "This Committee ought really to be congratulated upon their system of working, if it be carried out so completely in England as we have been informed has recently obtained in Lincolnshire, when it was suggested that the visitors attracted to the neighborhood by the festivities incidental to the race-week should be applied to for their signatures. How could there be a more perfect way of obtaining opinions on an important scientific question, than by sending to young ladies in country houses, papers for such a purpose? Happening to see one of these valuable documents, we observed that three-fourths of the names were those of ladies, one of whom, however wise in her generation, only gave her initials, as she thought that 'by so doing, her name would carry greater weight.' How charming in a ball-room for one of those enthusiastic young ladies to be able to make it a stipulation that, if she danced with him, he must sign her anti-vivisection paper?"

Dr. J. Murdock Harvey.—At a special meeting of the Medical Staff of the North-eastern Dispensary, held December 10th, 1875, a committee of three was appointed to draft resolutions regarding the death of the late Dr. J. Murdock Harvey, consisting of Drs. W. Schoonover, D. H. Mount, and E. H. M. Sell, who presented the following preamble and resolutions, which were unanimously adopted:

Whereas, The members of the Medical Staff of the North-eastern Dispensary having learned of the sudden demise of their esteemed brother and co-laborer, Dr. J. M. Harvey; therefore,

Resolved, That in the death of Dr. Harvey this medical staff has lost one of its best members, and a most zealous laborer in the cause of medical science. Self-sacrificing and generous to a fault, none knew him but to love him. He died a martyr to his profession, having contracted the disease which caused his death while administering to a charity patient in this Dispensary.

Resolved, That we cherish his memory as a noble example of professional integrity worthy of our emulation.

Resolved, That while we mourn his loss, we are assured that he is not dead, but sleepeth, and will one day awake to receive the reward of the righteous.

Resolved, That a copy of these resolutions be transmitted to the family of the deceased, as an expression of our sympathy in their great bereavement.

Resolved, That a copy of these resolutions be sent to The Medical Record.

W. Schoonover, M.D., *President.*
E. H. M. Sell, M.D., *Secretary.*

Small-pox in London.—According to the Registrar-General no death has been referred to small-pox in London for over four months.

Weekly Bulletin of the Meetings of Medical Societies.

Monday, January 3.—New York Neurological Society.

Thursday, January 6.—New York Academy of Medicine, 12 W. 31st st. Election.

Friday, January 7.—New York Medical Journal Association, 12 W. 31st st.: "Alopecia Areata." Dr. H. G. Piffard.

Original Lecture.

THE INFLAMMATIONS AND THE CONGESTIONS OF THE NON-GRAVID UTERUS.

PRELIMINARY LECTURE

By E. R. PEASLEE, M.D., LL.D.,

PROF. OF GYNÆCOLOGY IN BELLEVUE HOSPITAL MEDICAL COLLEGE.

PART II.

GENTLEMEN:—The second cause of the unsatisfactory progress respecting the inflammations and the congestions of the uterus is—

The assumption that inflammation is the principal, if not the exclusively controlling, element in uterine pathology.

To a student of our science, the idea that uterine disease in general is produced by any single pathological condition, is simply absurd. Yet the following exclusive views have produced as many epochs in the history of gynæcology since I began to give special attention to this department of practice. From 1835 to 1845 Lisfranc, of the La Pitié Hospital (Paris), treated cervical ulceration as the only important uterine affection besides the malignant diseases. Dr. J. H. Bennett, in his work published in 1845, maintained that "ulcerative inflammation of the os and cervix uteri is the one great element in uterine pathology." Ten years later, Velpeau proposed the mechanical view of this subject, attributing these affections, inflammation even, to displacement of the uterus; and which has been revived by Dr. G. Hewitt in the last edition of his work. The surgical epoch, starting about 1864 with the notion that almost all uterine affections, and many others peculiar to women, demand surgical, and even operative interference, reached its acme by 1870, and fortunately is still declining. Dr. Chapman, in 1872, asserted in his work entitled "Hysterology," that congestion is the fundamental element in uterine pathology; a work of much merit notwithstanding its exclusiveness, but not duly appreciated by the profession at large, since most gynæcologists even, ignore the fact that the uterus is capable of becoming congested.

We find, in fact, as might be expected, that inflammation, displacement, congestion, tumors, carcinoma, and various other conditions may be the starting-point in uterine affections, and the history of each case must determine its originating element.

But the asserted exclusive agency of inflammation in uterine pathology has very naturally led to a third cause of the confusion I am illustrating, viz., *the mistaking another pathological condition for inflammation, and calling it such—which differs from inflammation in all its characteristics and effects.*

The condition thus misunderstood and mistaken for inflammation, proves on examination to be congestion alone; and it is important next to consider the

NATURE, VARIETIES, AND EFFECTS OF CONGESTION.

If inflammation be produced in the web of a frog's foot by the application of a stimulant, *e.g.*, the tincture of capsicum, the following order of changes occurs:

1. There is an increased rush of blood into and through the vessels of the part; *i.e.*, the activity of the circulation is increased.

2. The capillaries become abnormally distended by the blood, and thus partially lose their power of transmitting it. Now there is diminished circulation in the part, though too much blood.

The first of these conditions is active and the second is passive congestion. There is hyperæmia, or excess of blood in the vessels, in both.

3. The action of the stimulant being still further prolonged, a third change ensues, viz., the blood becomes stagnant in the over-distended and paralyzed vessels, and the liquor sanguinis exudes through the vascular walls into the inter-vascular spaces, and the vessels now contain the blood-corpuscles alone. In other words, as will be at once perceived, actual inflammation has now obtained.

I verified this statement thirty years ago, and recently J. Lister has also done so; and I reproduce it here to show the ready merging of either form of congestion into inflammation.

On the other hand, if the action of the stimulant be withdrawn, the reverse order of these changes now occurs: inflammation exhausting itself, to be followed by passive congestion; this by active congestion; and the last, in favorable cases, by the normal state of the circulation of the part. The stimulant action might also have been applied only long enough to produce active congestion, or that and subsequently passive congestion, and thus to have stopped short of the inflammatory process.

Congestion of either form, therefore, strongly predisposes to inflammation in a part; and the latter leaves the part for a time in a state of congestion, unless it ends promptly in resolution.

Congestion of both forms may end promptly (in resolution), or, unlike inflammation, may continue for an indefinite period. Any given case of either kind, not promptly disappearing, may therefore be recent or chronic. And the effects of chronic congestion, both active and passive, are next to be considered.

I. CHRONIC ACTIVE CONGESTION.—ITS EFFECTS.

Active congestion being merely an exaggeration of the normal circulation of a part,* will, if long continued, as might be supposed, produce an increased nutrition of the part; hypertrophy, as I have already explained it, being the common result of active congestion, if it become chronic. It also increases the natural secretion of a part (if a membrane), but without changing its quality. Meantime, it is liable at any moment to pass into passive congestion, and then into inflammation. It is not attended by fever.

I shall present to you no less than eleven distinct illustrations of hypertrophy in the uterus, produced by chronic active congestion, the nature and cause of these changes having hitherto been overlooked.

The hypertrophy from chronic active congestion may often be removed by appropriate treatment, but in some cases it must continue through life.

The redness of active congestion is rosy—a mere exaggeration of the natural color of the part—and readily disappears on pressure, to return at once. The eruption of a mild case of scarlatina is an illustration.

II. CHRONIC PASSIVE CONGESTION—ITS EFFECTS.

In specifying the effects of passive congestion, I need allude to its recent form only so far as to repeat its tendency to pass into inflammation. But two distinct forms of passive congestion must be mentioned in

* Active congestion is normal in the uterus and ovaries during ovulation and menstruation; but becomes pathological if it persists after the menstrual period ceases.

reference to its origin; viz., venous (or mechanical) and capillary passive congestion.

1. Venous congestion results from mechanical obstruction to the veins of the part. As illustrations, I mention congestion of the lungs from contraction of the mitral orifice of the heart; of the stomach and intestines from cirrhosis of the liver; and, as especially important to my main purpose, congestion of the uterus and ovaries from its various displacements, and from the pressure of intra- and extra-uterine tumors. In all such cases congestion commences in the veins, and extends secondarily to the capillaries of the part.

2. Of passive congestion, which commences in the capillaries, the following examples may be given: The general lividity on the surface of the body in cases of pulmonary emphysema—the highly carbonized blood directly paralyzing the capillaries; the blueness of cold hands; the redness of the nose, ears, or extremities of those whose circulation is languid from any cause. Hence, also, the hypostatic congestion in low fevers; and in the uterus, passive congestion is often produced by either of the two causes next to be mentioned.

The *immediate cause* of capillary passive congestion is probably a paralysis of the nervi-vasorum (Rokitansky), depending upon a debilitated state of the nerve-centres, or a pathological state of the blood acting more directly upon the vaso-motor nerves. The *predisposing causes*, all of them especially active in producing passive congestion of the uterus, are:

1. Local debility of the part, especially as ensuing after a previous inflammation.

2. General debility from any cause.

3. A diminished amount of fibrin in the blood (hypinosis).

The redness of capillary passive congestion is always of a dark, and sometimes livid tinge, returning slowly after pressure, as seen in the eruption of a case of asthenic scarlatina. There is no increase of temperature, and there is a sense of weight and dulness, rather than pain. There is no general hyperinosis, or subsequent induration, as in inflammation, and no subsequent hypertrophy, as after prolonged active congestion. There is no fever.

A. The effects of venous passive congestion are:—

1. Œdema from effusion into the connective tissue of the part, and dropsy of the serous cavities.

2. Extravasation on the capillary side of the obstruction; *e.g.*, hematemesis from cirrhosis of the liver, and hemorrhage from varicose veins.

3. Increase of secretion of the part (if a membrane), with change in quality.

4. A thrombus (coagulum) from the obstructed vein may enter the heart and lungs, or into the general circulation, and finally lodge in some part to constitute "embolism."

5. Gangrene may result, as from bandaging a limb too tightly.

6. Inflammation is common in parts easily disposed to it. As the uterus is naturally peculiarly indisposed to assume the inflammatory process, either form of passive congestion may exist, for many years even, in that organ without producing it.

B. The effects of capillary passive congestion are:—

1. Œdema of the part from effusion; dropsy of serous cavities.

2. Atrophy of the part, with some hardening, and more or less of degenerative change.

3. Increase of secretion, with change in quality.

4. Liability to active congestion, with recurring inflammation; in the uterus, especially to the former.

Finally, the general effects (the sequelæ) of inflammation, active congestion, and passive congestion, may be summarized as follows. The bearing of the preceding views on the inflammations and the congestions of the uterus will appear as I proceed to consider them.

INFLAMMATION AND CONGESTION.

		IMMEDIATE EFFECT.	SECONDARY CONSEQUENCES (SEQUELÆ).
Inflammation		Exudation producing Œdema. Fever.	Absorption (resolution). Adhesions; suppuration. Induration. Diminished and changed secretion.
Congestion	Chronic active.	Hyperæmia with slight œdema. No fever.	Hypertrophy and Hyperplasia. Increased but not changed secretion.
	Chronic Passive	Hyperæmia with effusion, producing pitting œdema. No fever.	Extravasation. Thrombosis and embolism. Dropsy. Increased and changed secretion. Atrophy and degeneration.

Original Communications.

PUERPERAL FEVER, WITH SPECIAL REGARD TO ITS NATURE, ETIOLOGY, AND TREATMENT.

By W. B. RODMAN, M.D.,

FRANKFORT, KY.

Being a paper read before the Transylvania Medical Society, at Shelbyville, Ky., Nov. 3, 1875.

I APPROACH the subject of this paper with great diffidence and distrust in my ability to bring order out of the chaos of opinions, which have been and are still held by the numerous authors and writers on puerperal fever. Probably more has been written, to less purpose and with less unity of opinion, on this than any other disease. This remark will certainly be verified by any one who studies the literature of the past and present on this subject. So varied and conflicting are the opinions of various authors, equal in eminence, that the more one reads, the more vague and confused his ideas become; until at last, in utter perplexity, he feels that he is unable to master even the nature of the disease in question. There has been more antagonism as regards the nature and etiology, than the symptoms, treatment and pathology, although the latter is exceedingly variable, and has been the subject of much discussion and difference of opinion.

I will not attempt to discuss puerperal fever thoroughly as regards the history, pathology, symptoms, diagnosis and prognosis, but will give to the nature, etiology and treatment (especially the prophylactic) such prominence as I think they deserve. My reasons for this will appear before this paper is concluded.

In the "Nomenclature of Diseases" drawn up by a committee appointed by the London College of Physicians, puerperal fever is defined as "a continued fever, communicable by contagion, occurring in connection with childbirth, and often associated with extensive local lesions, especially of the uterine system." To this definition this note is added: "In returning cases of puerperal fever, the more important local lesions, such as peritonitis, effusions into serous and synovial cavities, phlebitis and diffuse suppuration should be specified."

I believe that the only true classification of all specific or infectious diseases must be made with due regard to their etiology. This statement becomes the

more evident upon mature reflection. Classification from symptoms and pathology brings endless confusion in its train. If we were to decide the nature of a disease from the symptoms, an ordinary dysentery would become an epidemic dysentery, an ordinary cholera morbus would not differ, except in degree, from Asiatic cholera, nor diphtheritic laryngitis from membranous croup. If we relied on pathological changes, a malarial fever would be a splenitis, and epidemic cerebro-spinal meningitis would not differ from an ordinary meningitis. Take for instance this illustration, which seems pertinent to the present subject. A patient is taken violently ill, with symptoms of severe systemic poisoning from some acute infectious disease. Death may occur in twenty-four or thirty-six hours. There may be no characteristic symptoms, and the most careful autopsy reveal no pathological changes by which we are able to characterize the nature of the disease. It may be said that this is an extreme case. Still, cases have occurred, especially in puerperal women, termed by the French "foudroyant," that is, thunder striking, crushing, which fully sustain the illustration. Here we would be at a loss to know with what particular poison we had to contend, but by tracing the history of the case to its *cause*, we may find that our patient has come in contact with scarlatina, variola, erysipelas, or has been infected with a large quantity of septic poison, which has produced death so rapidly, that no characteristic symptoms or pathological changes have had time to develop. Other illustrations could be given, but these are enough to prove that symptoms and pathology neither separately nor combined are sufficient for a correct and satisfactory classification, especially in specific or infectious diseases. On the other hand, reasoning from cause, a slight varioloid is essentially the same as a malignant variola: the mildest scarlatina, which is scarcely noticeable, is identical in its nature with malignant scarlatina, which may carry off the patient in twenty-four hours. "The cause the same, the nature of the disease the same," is an axiom worthy of adoption in the discussion of specific diseases.

When we have discussed the etiology of puerperal fever we will see that the term is unfortunate, that really there is no such disease sui generis, but that various authors have given the name to diseases which are as distinct in their essential qualities as erysipelas, variola, scarlatina, septicæmia and pyæmia. As Liebermeister justly remarks, the nature of puerperal fever can never be properly understood until the causes are defined.

Let us now see what the most probable causes of puerperal fever are, sifting carefully the mass of evidence before us; and it would be proper, as Mr. Spencer Wells suggests, to discard all theories which are not in some measure supported by facts. Many physicians who have written on or discussed puerperal fever are agreed, that some of the most violent attacks have been undoubtedly due to contact, mediate or immediate, with cases of scarlatina. It is unnecessary to mention all those who have expressed this opinion, and it will be amply sufficient to refer to a few, who have sustained their theories with facts, which seem to me indisputable. Dr. Braxton Hicks mentions a series of eighty-nine cases of puerperal fever; of these, thirty-seven were clearly traced to scarlatina; twenty had the rash, seventeen had not. I will venture to report the history of two of these. A woman was taken with the most violent form of puerperal fever, and died about the third day. There was no previous history of scarlatina, but in a few days two of her children had malignant scarlet fever, and died. A lady had been delivered twelve hours when feverish symptoms set in; a pile already inflamed became very tender and painful; from this part a blush spread, something like erythema, but without any defined edges, and extended over her back. About the third day arthritic pains and swelling commenced, with delirium. These symptoms increased in intensity, and she died in great agony on the fifth day. No *exanthematous* exposure could be discovered; in a week, however, two of her children died with scarlatina, and the infant barely escaped with its life.

Trousseau mentions an endemic of scarlatina occurring in a village in France, which proved so fearfully fatal to puerperal women, that even the poorest were compelled to leave the place when they were confined, to escape almost certain death.

I cannot offer a better illustration of the power of erysipelas to cause puerperal fever, than by relating a series of circumstances which occurred in Frankfort last winter, and which I have previously reported in THE NEW YORK MEDICAL RECORD for Aug. 14th, 1875. Dr. —— attended a case of facial erysipelas from the 9th to 22d December, 1874. During this time (Dec. 14th) he delivered Mrs. P. of a child at full term. On the 15th she had a low form of fever (puerperal?), with some peritonitis, and died on the 17th. On Jan. 13th, 1875, he delivered Sally W., colored. On the 15th she had the same fever, with similar symptoms, and died on the 16th. January 14th, he examined the womb of non-puerperal Mrs. W. He found it prolapsed, and with two recent abrasions on the os. On the 15th she had fever and symptoms resembling those of the two puerperal women, and died on the 17th. January 10th, Dr. —— examined the womb of Louisa (colored). On her uterus there were abrasions. She had the same fever, beginning on the 13th, and died on the 19th. No other physician in Frankfort or vicinity had any cases of this kind. As no autopsies were made, I cannot say what pathological lesions existed. I saw, in consultation, one of these cases (white), and there was no appearance of erysipelas externally, but I firmly believe that these women all died of that disease.

It has been suggested that it is to country doctors, or those practising in the smaller towns and villages, that we must look for *facts* which will enable us to arrive at a proper understanding of the nature of the causes of puerperal fever. This is obvious for the following reasons: It is next to impossible for those living in large cities, or practising in hospitals, to exclude various *factors* which may abound. Given a case or cases of puerperal fever, occurring in a large city or a hospital, we cannot say with any degree of certainty whether the patient is infected by some of the exanthemata (which are almost always present), or whether the infection is due to pyæmia or septicæmia, which is often present in hospitals, or whether it is due to autogenetic poisons, that is to say, poisons which may originally and exclusively develop in the body of the patient herself. Suppose, again, that a practitioner should have reason to believe that he had been the medium of contagion through his clothes or person. He might, if engaged in a large city practice, or in hospital attendance, have seen, recently, cases of scarlet fever, erysipelas, etc., or have been engaged in dressing a septicæmic wound, or in making a post mortem examination. Here, naturally, he is at a loss to say which of these possible factors is the true one. Not so with the country doctor. Possibly for weeks he has seen not a single case of any contagious disease, has dressed no wounds, has made no autopsies. The cause is here narrowed within certain limits, and is the more easily and certainly ascertained. For these reasons I contend that such facts as

I have mentioned above, as coming under my own observation, are valuable in the highest degree, for in these every possible factor can be excluded except erysipelas. Trousseau, who gloried more in facts than theories, and who was one of the closest of observers, relates that during an endemic of puerperal fever in the Hôtel Dieu, most of the children born of these puerperal women died of a malignant erysipelas, which was so rapid in its course as to leave no appreciable internal lesions. If we can believe that these puerperal women had a disease, which produced erysipelas in the children, we know that their disease was erysipelas, although the characteristic symptoms and lesions were absent. We know for truth that variola, scarlatina, and erysipelas beget, respectively, variola, scarlatina, and erysipelas. When a mare foals a mule, we know that she has been bred to jack and not to a horse. When we see erysipelas in the child, produced by puerperal fever in the mother, we know that her disease is erysipelas, call it what you will.*

Dr. Parry, of Philadelphia, in a paper published in the *American Journal of Medical Sciences*, January, 1875, has fully shown that diphtheria may be a fruitful cause of puerperal fever. He mentions a series of cases which would be called puerperal fever, where the peculiar deposit existed in the genital organs. Prof. Martin, of Berlin, believes that all cases of puerperal fever are diphtheritic in their nature; but this is an extreme view which he alone endorses.

It is unnecessary to produce here facts to prove that other acute infectious diseases—as typhus, measles, small-pox, etc.—can also produce a fever which may be called puerperal. It is reasonable to suppose that if one infectious disease can produce it, another can; but that scarlatina and erysipelas are more prone to cause outbreaks of puerperal fever than the others seems probable. Even Prof. Barker, who contends that puerperal fever is a disease sui generis, and has distinct entity, acknowledges that the exanthemata can produce, in puerperal women, a fever strongly resembling that which is called puerperal. Might he not go farther, and say that the exanthemata will produce, in the puerperal woman, a disease which the great mass of the profession will unhesitatingly designate puerperal fever?

This much to prove the part that the infectious diseases play in the etiology of puerperal fever. It has been urged as an argument against this view, that in many of the cases of puerperal fever, there are not the characteristics of the disease which is supposed to have been the cause. I answer that the puerperal condition may so modify the disease as to make the recognition difficult; or that death may take place so rapidly that there is not time for the development of characteristic symptoms or lesions. Again, it has been said that puerperal women have been exposed to the exanthemata, and have had no puerperal fever. This proves nothing. It is not every one who is exposed that falls a victim to the poison. If it can be definitely proven that a dozen women have had puerperal fever caused by exposure to an exanthem, the fact of a hundred having escaped under similar exposure cannot disprove it.

While there are many who believe in the power of other infectious diseases to cause puerperal fever, some of them do not deny that pyæmia and septicæmia have also their importance. On the other hand, many eminent authorities, as Spencer Wells, Leishman, Barnes, Graily Hewitt, D'Espine, Billroth, and the mass of the profession in Germany believe that most of the cases of puerperal fever are purely septicæmic or pyæmic in their nature.

Billroth defines septicæmia as a "constitutional, generally acute disease, which is due to the absorption of various putrid substances into the blood, and it is thought that these act as ferments in the blood, and spoil it so that it cannot fulfil its physiological functions." It is believed that the septic poison is absorbed by the lymphatics alone, and that these vessels can only absorb it when there is a wounded or abraded surface, and not even then, provided there is an abundance of healthy granulations. Septicæmia may be either heterogenetic, that is, the poison is introduced from without, or autogenetic, where the poison is developed originally and exclusively in the body of the patient herself, and where outside influences have nothing at all to do with the infection. When we reflect on the condition of the puerperal woman, remembering the condition of the genital organs, the placental wound, the abrasions of the cervix and os uteri, and laceration of the perineum, the wonder is, not that so many women have septicæmia, but that so many have escaped the danger from within and without. The important fact to be remembered here is, the protective power of the granulations, for generally before septic poison can be developed (especially the autogenetic), granulations have covered the wounds and abrasions, and thus an impermeable barrier is set up to the entrance of the poison. Anything, then, which interferes with the granulating process, or which disturbs the granulations after they have formed, is bound to predispose the patient to septicæmic infection. It is evident that many diseases, by retarding the development of granulations, may cause septicæmia, as well as handling the parts in surgical operations after delivery. The sources of autoinfection are blood clots retained in the uterus and vagina, retention of parts of placenta or membranes, cloths in the uterine sinuses, and possibly thrombosis. If we conclude that the last may cause septicæmia from disintegration of the clot, traumatism is not a necessary precedent, for here the poison is already in the blood; but it is an exception to a very general rule for septicæmia to develop, except from a wound or abrasion. If it could be proven that septic or pyæmic miasms could be absorbed into the lungs, in the form of fungi or molecular bodies, it would revolutionize present theories. The sources of hetero infection are numerous. The attending physician may have about him the poison of a post-mortem examination, or of a septicæmic or pyæmic wound, or dissection of the dead body; and especially is he apt to communicate the disease if he has handled the putrid discharges of other puerperal women, or cloths which contain them. Some strong proof has been brought forward where a sore on the hand, which was in itself not poisonous, has been the source of infection. Not only, however, from the clothing and person of the attending physician, midwife, or nurse can the infection arise, but the poison may be in the air, especially of hospitals or crowded tenements, or any place where there is an aggregation of sick or wounded.

We all know the great danger to which patients with wounds are subjected in closely crowded hospitals, let the cause be what it will. Pyæmia is apt to become endemic, and count its many victims, especially should one case occur within the wards. So, in a hospital for lying-in women, is pyæmia apt to become a scourge. Pyæmia is defined as "a disease due to purulent infection, in other words, to the presence in the blood of pus or certain of its constituents." The old theory that pus, as such, could not enter the blood, has been proven fallacious by recent pathological researches, but

* I am aware of the fact that the etiology of erysipelas is not so definitely agreed on as that of the other exanthemata. Still I have given the view that is generally entertained.

it is principally to the liquid part of pus that pyæmia is due; the pus globule or leucocyte being innocuous. It is certainly unnecessary for me at this time to go deeper into the etiology of pyæmia than to say, that it is due to the absorption of pus, which may be influenced by the condition of the patient and his surroundings, and to discuss those surroundings. This brings us to the question "What relations have bacteria and allied organic forms to the pyæmic process in the puerperal state?" This is a difficult question to answer, as the study of these bodies is yet in its infancy. We know as yet comparatively nothing concerning them. Some eminent authorities contend that they are more the effect than cause of infection. Dr. B. W. Richardson believes they are merely coincident with disease; others again believe that they are the medium of contagion in certain instances. I believe no one at the present day denies the existence of bacteria, but what influence they exert is still involved in obscurity. They seem to exist everywhere, and if this be so, it is almost proof positive that they are in themselves innocuous. Prof. Lebert's theory is that each infectious disease, as the exanthems, typhoid, typhus, and relapsing fevers, etc., has its own peculiar protomycete or organic germ, which is in itself capable of generating these diseases respectively. But suppose they exist in hospitals or sick-rooms in great abundance, as has been demonstrated by Pasteur, Chalcot, Reveil, and others, is it not more likely that they may absorb the various poisons from infectious diseases, poisoned wounds, etc., than by coming in contact with a healthy person or a healthy wound produce the disease the poison of which they have absorbed? Can we not with propriety liken them to emigrants? Healthy emigrants coming into port will not cause disease of any kind, but let them be saturated with a specific poison, and the great probability is that diseases, specific in their nature, will ensue to those with whom they come in contact. If this theory be true, we can understand the prevalence of septicæmia and pyæmia in the wards of hospitals, and especially in hospitals for lying-in women. Billroth says that he has never seen an instance of this pyæmic or septicæmic miasm infecting the body except through a wound or lesion, though he does not deny the *possibility* of infection through the lungs. Pyæmia and septicæmia, then, may be contagious in a restricted sense of the word, and if so, it is easy to see that they may be fruitful sources of some forms of puerperal fever.

I believe that from the infectious diseases septicæmia and pyæmia arise all the cases which can be properly classed as puerperal fever. Since it is regarded as a disease communicable by contagion, it is useless here to discuss those cases of fever in the puerperal woman which are purely local in their nature, as non specific metritis peritonitis, etc. These diseases do certainly occur in the puerperal woman, and are accompanied by high fever, but no one will pretend to say that they are contagious. The condition of the puerperal woman, both mentally and physically, has been supposed to increase their liability to puerperal fever, even independently of any specific poison. Woman during pregnancy is peculiarly exempt from various morbific influences, but as soon as she is delivered she becomes, on the contrary, more than ordinarily susceptible of disease; but this could not produce scarlatina, erysipelas, heterogenetic septicæmia and pyæmia, unless other causes were present, and these causes must be the specific poison of the disease contracted. One reason that woman recently delivered is more prone to take a specific disease than at any other time, is the very rapid action of the uterine absorbent in the first two or three days after delivery. It is true that a woman will usually escape puerperal fever in certain of its forms, if she safely passes the first four or five days after delivery.

During the discussion of puerperal fever recently held at a series of meetings of the London Obstetrical Society, Mr. Spencer Wells propounded the following questions, so that the arguments of the different gentlemen might take a definite course:

1st. "Is there any form of continued fever communicable by contagion or infection, and occurring in connection with childbirth, which is distinctly caused by a special morbid poison, and as definite in its progress, and the local lesions with it, as typhoid, typhus, scarlet fever, small-pox, or measles?" To this I answer, No. The affirmative of this proposition cannot be proven until we find a contagious puerperal fever which has not arisen from some infectious disease, or is not septicæmic or pyæmic in its nature, and which will not, in its turn, produce a disease which we can recognize as a certain infectious disease, or a pyæmia or septicæmia. This is the view entertained by every physician participating in the discussion except Prof. Barker, of New York.

2d. "May all forms of puerperal fever be referred to attacks of some infective continued fever as scarlet fever or measles, occurring in connection with childbirth on the one hand, or on the other to some form of surgical fever, or to erysipelas caused by or associated with changes in the uterus and neighboring parts, following the process of childbirth?" This question was answered in the affirmative by the great majority, some few regarding fever from any cause in the puerperal woman as puerperal fever.

3d. "If all cases of contagious or infectious diseases which occur under other conditions than that of childbirth are set aside, does there remain any such disease as puerperal fever?" I think not; at least it remains to be proven. Leaving out Spencer Wells's 4th, we come to the 5th. "What relation have bacteria and allied organic forms to the pyæmic process in the puerperal state?" This question I have already discussed.

If the opinions advanced in this paper are correct, the pathology is necessarily very variable, and will resemble that of the various diseases which cause puerperal fever, except in so far as the lesions may be modified or influenced by the puerperal state. It is unnecessary for me to recapitulate here the pathology of the various infectious diseases, pyæmia and septicæmia. We would naturally suppose, that the womb and surrounding parts are principally affected, as it is through these the poison in most cases infects the system. It must be remembered that death may occur so rapidly, from an overwhelming poisoning of the entire system, that no important lesions may be discovered.

The symptoms occur in the first few days after labor, especially in endemic or epidemic puerperal fever, and generally within the third day. The reason for this I have already mentioned. In autogenetic septicæmia or pyæmia they may come on later. Like the pathological changes, the symptoms will vary according to the cause, though we may say with tolerable certainty that they are generally decidedly asthenic.

The diagnosis and prognosis it is unnecessary to discuss, as they depend also on the nature of the cause.

Treatment.—Spencer Wells's fourth question is, "Assuming that a form of continued fever, communicable by contagion, inoculation, or infection, does frequently occur in connection with childbirth, how can its spread in private and hospital practice be most certainly prevented or checked?" This is practically the most important part of the whole subject. When we

take into consideration the infectious and contagious nature of puerperal fever, and the different sources from which this infection and contagion may arise, we are surprised that the disease is not more generally prevalent than it is. In a hospital for lying-in women (which should be a distinct building, and not some particular ward of a general hospital) the utmost care should be taken that no infectious disease be admitted; and should a specific disease arise within, it should be at once isolated, and that completely. The utmost regard for cleanliness should prevail, and all soiled cloths, bed-clothes and clothing should be boiled and thoroughly disinfected as soon as possible. No physician should be allowed to attend any woman, without the greatest care had been taken, that he, his clothing and instruments, were perfectly free from all morbific poisons which might originate puerperal fever. Even these precautions will not protect patients in a lying-in hospital from nosocomial malaria, from bacteria, from those organic germs which only too frequently abound in the wards of hospitals. Probably the best plan to disinfect a room or ward of these germs or ferments would be the sublimation of sulphur, which produces sulphurous acid, a substance we well know to destroy the process of fermentation * Dr. Wynn Williams, of England, has recommended for a similar purpose iodine. A few scales of iodine placed on a hot metal plate are sufficient to disinfect the clothing and person of the physician, so that he may attend a lying-in woman with impunity. Special attention should be paid to the hands and nails. The history of puerperal fever abounds with instances where this dread disease has followed a certain physician until "his path became a highway of sepulchres." Undoubtedly he had communicated the disease by inoculation or contagion, the poison clinging to his person. Most of these cases, however, occurred before the days of disinfectants. Soap and water *will not* remove the poison from the hands. This fact I know from personal experience and observation I believe, however, that should a physician have the poison on his hand, and should wash them thoroughly with a solution of permanganate of potash, chloride of lime or zinc, chlorinated soda or carbolic acid, and apply a carbolated oil to his finger when making the necessary examination, he will certainly rid himself of the poison, and may attend cases of midwifery without danger to his patient. I believe it is Dr. Graily Hewitt who says that "a *nail-brush* is one of the most important instruments in the accoucheur's outfit." We all know that a physician has often and over again attended scarlet fever, erysipelas, dressed old wounds, and without taking any special precautions has attended lying-in women with perfect safety. It does not follow that there will not be instances when he will have good reason to regret that he had not disinfected his person and clothing. Ninety-nine times he may have no trouble, but the hundredth may bring disaster in its train that he can never forget or his patrons forgive. Provided a physician has had a case of puerperal fever in his practice should he abstain from midwifery practice for a certain length of time? If he changes every article of clothing and thoroughly disinfects his person, paying special attention to his hands and nails, I think that he may safely continue. But if, in spite of these precautions, a second case should occur, he owes it to humanity to give up at once all his obstetrical engagements for at least a month. The case of Dr. Rutter, of Philadelphia, is certainly a remarkable one. In spite of frequent ablutions and self quarantine, puerperal fever followed him until he left Philadelphia. I have recently seen it stated that Dr. Rutter had a chronic eruption of the skin, attended by a purulent discharge, which in itself might have produced puerperal fever in spite of all precautions which he took. Mr. Huntley, of Jarrow-on-Tyne, England, shows by a series of conclusive arguments, that "a secretion from his own hands was the cause, three times successively, after intervals of several months' practice, of conveying poisonous matter to patients, and so inducing puerperal fever." These facts should convince us all that a physician cannot be too careful when he attends a case of labor. The nature of the disease, and the great mortality which frequently attends it, must convince us that it is principally the prophylactic treatment which will avail us much in puerperal fever.

The treatment of a case of puerperal fever, when once initiated, must vary according to the cause. In other words, we must treat erysipelas, scarlatina, pyæmia, and septicæmia in the puerperal woman as we would in a non-puerperal person, with due regard to the modifications induced by the puerperal state. As in nearly all cases there is a decided tendency to asthenia, depleting remedies are out of the question. Quinine and tincture of the chloride of iron are the two constitutional remedies on which I would place most reliance. Opium should be given freely if there is much pain from peritonitis, metritis, etc. The local treatment should be the application of hot cloths or turpentine stupes to the abdomen. Blisters are hardly admissible. There is one point especially deserving of attention. In nearly all these cases there is excessive foulness of the lochia, amounting in some instances to putrefaction. Here antiseptic and disinfectant injections are of the greatest benefit. Numerous instances are on record where the most violent symptoms of puerperal fever have subsided like magic after intra-uterine injections of some disinfectant. For this purpose solutions of carbolic acid, permanganate of potash or chlorinated soda, and probably salicylic acid, will answer. The patient should be sustained by the most liberal diet and the use of stimulants. The use of the sulphites internally, as recommended by Prof. Polli, of Milan, has been tried, but the success has not been as satisfactory as we would expect from the theory. Spencer Wells's 6th and last question, "What is the value of antiseptics in the prevention and treatment of puerperal fever?" received but little attention in the recent discussion before the London Obstetrical Society. I have tried to briefly answer it when speaking of the treatment, both prophylactic and symptomatic. Most of the time in the recent discussion was consumed in the consideration of the nature and etiology of puerperal fever. It was remarked (I think in a review of the discussion) that by collating facts principally from physicians like ourselves, having what may be called a country practice, and by bringing pathology in all its bearings to our assistance, in *ten years* the profession might be able to say exactly what puerperal fever is, to define it as clearly as we can small-pox, typhoid fever, etc.

To us, then, gentlemen, falls the task of keeping an accurate record of every case of puerperal fever which may come under our own observation, using our best endeavors to trace every case to its source, if possible. Unfortunate and disagreeable as it might be for any of us to believe that we had been the medium of contagion, and probably the cause of death itself, still, let us imitate the example of those noble members of the profession who have confessed their misfortunes, I cannot say faults. By so doing we may warn our

* See remarks of Prof. Barker, in Oct. 30 No. MEDICAL RECORD, with regard to chlorine gas for same purpose.

medical brethren, and enable them to shun that which may prove humiliating to themselves and calamitous to their patients. If I can persuade you all, or any one of you, that this is the proper course to pursue, I will feel that this paper has not been written in vain.

A CASE OF URETHRO RECTAL FISTULA PRODUCED BY THE FORCIBLE INTRODUCTION OF SOUNDS.

RECOVERY AFTER PERINEAL SECTION AND RECTAL SUTURE.

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THE establishment of a fistula between the urethra and rectum has most often followed the penetration of catheters or sounds through the membranous portion of the urethra into the convexity of the last curve of the rectum, or into the portion surrounded by the sphincters. Only slight if any reference is made to this condition and its treatment in text-books on surgery, and but few cases are to be found in surgical literature. For this reason the following case is placed on record:

S. R., aged 40 years, born in Germany, merchant, married, consulted me last May for treatment of urethral stricture and cystitis. He stated that aside from his venereal trouble his general health had always been good. About fifteen years ago he contracted a gonorrhœa, which was neglected, and gradually subsided into a gleety discharge; about twelve years ago symptoms of stricture developed, for which he was treated by dilatation by various physicians. For ten years he has been in the habit of passing a No. 10 Engl. sound on himself at irregular intervals. About one year ago the stricture became very narrow, and cystitis developed, and he placed himself under the care of a physician, who used to pass a No. 12 Engl. sound, and injected the bladder. Much force was used at each introduction, and the patient suffered much pain, and lost blood. The cystitis and trouble in making water became very much aggravated, and about four weeks before I saw him he consulted another physician, who used great force in entering the bladder with a No. 11 sound; he suffered intense pain, and afterwards passed a large quantity of blood by the urethra. The sound was passed three times at intervals of three days, and the patient, instead of improving, found himself rapidly getting worse. In addition, he now noticed that he frequently passed wind by the urethra, and urine at each micturition by the bowel.

I first saw the patient on May 17th, 1875, and found him in a very nervous and feverish condition. He had had no sleep for several nights on account of having to pass water about every half hour, and micturition was accompanied by severe pain in the perineum, which radiated towards the back and right hip. The meatus allowed the passage of a No. 12 Engl. sound, which encountered an obstruction about half an inch in front of the bulbous portion of the urethra. This was easily overcome by a No. 10 conical sound, but a further obstruction was met with at about the membranous portion. All attempts to pass this stricture by various instruments failed, the instruments showing a tendency to deviate toward the right, and there was evidently a false passage in this location. While the patient passed urine in a very small forked stream, it was discovered that a considerable portion of it came away through the anus. Rectal exploration with the finger revealed a round depression, which felt like ulceration, immediately in front of the prostate, and about three-quarters of an inch in diameter. A No. 9 sound introduced into the urethra could be made to pass from about the membranous portion to the right into a false passage which led into the rectum. The patient was ordered warm hip-baths, poultices to the hypogastrium and perineum, and opiates. Bowels had moved freely. The urine contained much pus; no casts were discovered.

On May 18th, in consultation with Dr. Erskine Mason, it was decided to perform perineal section. The patient being etherized the meatus was incised, a sound introduced and external urethrotomy was performed in the usual manner. No trouble was experienced in the division of the posterior stricture. The neck of the bladder was well dilated with the finger, and a large amount of pus and stale urine was discharged. It was ascertained that the complication of urethro-rectal fistula had been caused by forcible sounding and the establishment of a false passage. The patient rallied well from the operation; he slept well and regained his appetite. All symptoms of cystitis had disappeared, which proved the advantage of the thorough dilatation of the neck of the bladder, by which free vent was given to the discharge of urine. Received quinine and tincture of iron. Passed four stools in the two days following the operation by the natural passage, but much flatus escaped by the perineal wound. During the four days preceding May 28th, he had no passage from his bowels, in consequence of which he had considerable headache and some fever, which condition was relieved by an enema of soap-suds and oil. On May 30th, a No. 16 Engl. sound was passed into the bladder by the aid of the finger in the rectum. The false passage was in close proximity to the urethra, and the latter could be felt as a thin wall between the sound and the finger.

Up to June 25th the patient had improved daily, and the perineal wound had undergone considerable contraction. On that date, being very constipated and feeling the necessity for evacuation, he took nearly two bottles of citrate of magnesia contrary to orders, with the result that nearly half of the fecal discharge came through the perineal wound. Severe constitutional disturbance followed, and the wound was with difficulty kept clean by means of injections and perineal douches of cold water. Quinine and opium.—On June 28th, by means of a Ferguson's rectal speculum, the rectal opening of the fistula, around which considerable ulceration had taken place, was discovered to be situated about 1½ inches from the anus. By means of Sims's probe, bent at a right angle for about an inch from its extremity and coated with nitrate of silver, the fistula was cauterized once every five days.

By July 10th feces ceased to pass by the wound, though wind passed frequently. By July 16th the perineal wound had contracted considerably, and the patient then was taken into the country, where he regained strength so rapidly, that after one week's sojourn he was able to walk out and take sea-baths. The passage of the sound once a week was continued.

On August 26th the wound had almost entirely closed, and could only be detected by stretching the perineum. Only a few drops escaped through it during micturition, though the patient was much annoyed by the passage of flatus through it. Rectal examination on September 8th revealed that the fistula had very much diminished in size, and now appeared as a valvular opening, with soft and granular edges; it measured about half an inch transversely. Cauteri-

zations were continued as before, and cold sitz-baths and perineal douches were continued at home.

Towards the middle of October the fistula had not closed and flatus continued to pass, sometimes by the meatus and sometimes by the small aperture in the perineum. I decided upon closing the fistula by means of sutures; and on October 20th, the patient being etherized, was placed on his left side, the sphincter ani was first thoroughly stretched by the thumbs, and then a two-bladed rectal speculum was introduced. A No. 16 sound was passed into the bladder so as to render the fistula more prominent in the rectum. By means of a curved pair of scissors, such as are used in the operation of staphylorraphy, the blades being bent at right angles to the handle, the edges of the fistula, which were raised as much as possible by a Sims's tenaculum, were freshened, and then three fine silver wire sutures were introduced, according to the method of operating for vesico-vaginal fistulæ. The patient received opiates to cause constipation. The operation was not followed by either fever or pain, he slept well, and there was no disagreeable sensation in either the rectum or bladder

The patient remained in bed up to October 26th, when he was placed on his knees and elbows, and the sutures were removed. The opening was found to have been united by the central suture and the suture to the left, while the angle to the right of the fistula had not closed, but the opening which remained was so small that no further trouble was anticipated. A copious evacuation, after a large dose of castor-oil, did not cause pain or re-establishment of the fistula, and at the present date, December 12th, the patient considers himself cured. The cold sitz-baths, however, as also the weekly passage of a No. 16 sound, are continued.

Progress of Medical Science.

Puncture of the Pericardium.—The following case is reported in the *Archives Médicales belges* by Dr. Villeneuve: A child, five years old, was suffering from pericarditis with effusion. According to the statements of the parents, the trouble dated from a fall two months before, soon after which the breathing began to be affected, the legs swelled, and the condition grew gradually worse. When the patient was seen by V. the symptoms had become very alarming. The face was swollen and mottled, the eyelids were œdematous, the lips cold and livid. There was also considerable œdema of the legs and scrotum. The pulse was too feeble to be counted, and auscultation failed to discover any cardiac sounds whatever. A fluctuating swelling, which undulated synchronously with the respiration, occupied the precordial region. Respiration was short, labored, whistling, and accompanied with pulsation of the jugulars. The case appeared desperate, and no medical treatment offering any prospect of success, it was resolved to interfere surgically. A Dieulafoy's aspirator was procured, and the tumor having been punctured at its most prominent part, two syringefuls of clear, yellowish fluid were withdrawn. The fluid continued to flow in a stream after the canula was removed, owing to the fact that the repeated application of blisters to the part had so thinned the skin as to prevent the edges of the wound from closing. With the aid of plasters, compresses and bandages, however, the aperture was finally closed. The result of the operation was a very marked relief of the child's asphyxiated condition; the heart-sounds could be heard again, and the pulse could be counted. The wound continued open and discharging for six months. The discharge was at first clear, and afterwards became purulent. The fistula finally healed, and the patient made a complete recovery.—*Journal de Médecine*, Aug., 1875.

The Value of Hysterotomy in the Treatment of Fibrous Tumors of the Uterus.—In a carefully considered monograph on the above subject by M. Samuel Pozzi, the following conclusions are stated:

1. Abdominal hysterotomy, in the treatment of fibrous bodies of the uterus, in an operation which although a very grave one, is in certain cases perfectly justifiable; it is fully entitled to a definite position in surgery.

2. No comparison, however, can be established between the indications for gastrotomy for uterine fibroids and those for the same operation in the case of cysts of the ovary.

Whilst the greater proportion of the latter demand or justify the operations by reason of their rapid and fatal course, the vast majority of the fibrous bodies of the uterus lack the indications which should be regarded as sufficient.

3. The operation should be reserved for the fibrous or fibro-cystic tumors, whose evolution is rapid, *galopante*, and are accompanied by grave symptoms that threaten life.

4. Large fibrous bodies which do not come within the above category, even though they give rise to serious accidents, should be treated by less dangerous methods. We know, in fact, that these tumors tend to grow smaller; that they are tolerated for considerable periods; and, in any case, it appears to be demonstrated by experience that the mortality resulting from the expectant treatment is far less than that which follows the operation of hysterotomy.

5. Whenever gastrotomy has been performed through an error in diagnosis, and a uterine tumor is found instead of an ovarian cyst, it is better to practise ablation, rather than to leave the operation incomplete, even though the fibrous body should not be pedunculated.—*Thèse d'agrégation*, par M. S. Pozzi.—Paris, G. Masson, libraire.

Resection of the Sternum.—Professor Costanzo Mezzoni reports, in the *Bulletin général de thérapeutique*, five cases of resection of the sternum, together with adjacent portions of the ribs and costal cartilages. In the first case the operation was performed on account of a large tumor situated in the middle of the sternum. The tumor was adherent to the bone, was painless, hard, and at certain points presented a sense of fluctuation, but further than this its nature is not stated. The sternum was removed entire, together with portions of the costal cartilages of the second, third, and fourth ribs, exposing the pleura of the mediastinum and the pericardium. The dressing consisted of charpie, which had been dipped in phenic oil and the permanganate of potassa. At first the case did well, the wound presenting a healthy granulating appearance, but fifteen days after the operation the patient succumbed to a hypostatic pneumonia. In the other cases the operation was performed for caries of the bone, occurring in scrofulous subjects, and in each instance the patient recovered. —*Journal de Médecine*, Aug., 1875.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, January 8, 1876.

CONTAGION IN OUR SCHOOLS.

THE prevalence and spread of scarlet fever and diphtheria among the school children of this city are facts which should awaken an anxious concern with the profession. It is unnecessary to say that the occurrence of the majority of these cases is explained by the fact of direct contagion. No matter what particular views may be advanced in regard to the modus operandi of the poison, we hardly believe there are any at all acquainted with the diseases in question who would be willing to say that they are not communicable, and hence not amenable to ordinary preventive measures. But, notwithstanding this belief, a belief shared in by the most intelligent portions of the lay community, we have these diseases cropping out in the schools day by day, under the very eyes of the teachers, and without any apparent effort on their part to arrest the spread. When a child carries a contagious disease from his school to his home there is always trouble and anxiety in the train, and not unfrequently death, besides the danger of the propagation to other members of the family and among the neighboring children. In the absence of sanitary inspection in our schools, it may seem hardly fair that we urge upon the teachers any extra duty to supply the deficiency; but we are convinced that with very little trouble on their part a great deal of good can be accomplished. And, after all, in this particular the teacher is the fittest person to act, being always in direct communication with every scholar, and being the first to be informed of any illness. It would seem to be a very simple task to send the ailing child home, and at the same time to assume, especially during epidemics, that the sickness may be of a contagious character. Neglect of such precautions causes the sacrifice of many valuable lives yearly, and so long as teachers consider that they have no moral obligations in the matter we can hardly hope for any change.

Even in the most contagious diseases the danger of infection during the initiatory symptoms is comparatively slight. This certainly is the strongest possible argument in favor of the prompt quarantining of a suspicious case. But while we allow that with the right disposition on the part of those who have charge of the children much disease may be prevented, there is another element in the question, and one which it is more difficult to meet, because in a measure beyond the control of the teacher; and that is, the premature appearance at school of those who have been the subjects of these infantile diseases. It is well known that the power of propagation lingers in many of these disorders long after convalescence has commenced, and as such a fact is one of the most difficult things for ignorant parents to appreciate, there is no wonder that many times the most dangerous poisons are sown broadcast. Any direct interference with the sending of such little ones to school would be considered as an infringement upon personal liberty, and would doubtless be strenuously combated on such grounds; but still there should be some means devised for checking the evil. We do not pretend to say what these means should be,—whether the re-establishment of sanitary inspection could effectually meet the requirements of the case, whether the Health Board could by a proper exercise of authority control this part of school sanitation, or whether to secure a more practical working to the purposed preventive system the teachers should have full authority to use their discretion in the matter. It is very certain, however, that there should be some measures adopted, especially in times of epidemics, to prevent the spread of these diseases. In the case of private schools, as the whole authority is vested in the principal, self-interest dictates a line of policy which is seldom wrong. The greatest possible care is taken to guard the scholars, and if all other means fail, the schools are closed for a time until the danger is past. This, it is true, is often done with our public institutions, but not until a large number of children have sickened and died; in other words, not until the mischief is already done which some reasonable preventive measure might have arrested at the beginning.

HOMICIDAL MANIA.

ANOTHER cold-blooded murder has been committed in one of our larger hotels, which we are told was caused by homicidal mania. The circumstances of the case, while they may seem to establish, scientifically speaking, the theory of emotional insanity, are not very assuring to the safety of those who are liable to be thrown in the way of these maniacs. An innocent man is shot by a stranger, with no provocation whatsoever; the stranger is found afterwards to be insane; and that, with the exception that a precious life is sacrificed, is about all. While there is a great deal of room for doubt in regard to the great number of criminals said to be insane, there can be no question concerning a certain few. There is, however, a very

melancholy satisfaction in discovering the latter and proving their case, inasmuch as it reflects so severely upon the policy of allowing the lunatics to go at large until the crime is committed. And yet the question as to the prevention is as difficult to answer as to the cure. Laws may be enacted to suit the emergencies of well-pronounced cases, but every now and then there will be a doubtful case as regards insanity, but a very dangerous one as regards murder.

THE PHYSICIAN'S MUTUAL AID ASSOCIATION.

Any association whose object is the care of the families of deceased medical men is worthy of our heartiest sympathy and support. The association to which we now more particularly refer, although in existence but a few years, has grown in numbers and increased in influence, so that its prosperity is assured. It now numbers three hundred and twenty-three members; has a permanent fund of three thousand dollars, with an assessment fund of over twenty-eight hundred, more than twenty-three hundred of which have been paid out to the families of deceased members.

At the annual election recently held, Dr. Mark Blumenthal was elected president; Dr. F. P. Foster, secretary, and Dr. Samuel Ayers, treasurer, with a board of trustees composed of representative and energetic men. Under the circumstances we do not see how the Society can fail to continue its prosperity, increase its membership, and extend its usefulness.

HOSPITAL APPOINTMENTS.

The exception taken to our remarks in the last number on the Presbyterian Hospital affair by a correspondent, who signs himself "One of the Eleven," deserves a passing reference. No one questions his right to an opinion in the matter, but the cause which he advocates is not strengthened by abusing the opposite side. Tact is certainly an accomplishment of which every one should be proud, and one which, exercised energetically will doubtless secure a position in the hospital; but it is hardly fair to charge those gentlemen who have been deposed with a lack of courtesy and of good behavior, since no facts upon which such a charge can be based have as yet come to light. On the contrary, if such facts could have been substantiated we doubt not that the Board of Managers would have presented them as reasonable explanations for their action. We entirely agree with our correspondent that the dignity of the profession can never be lowered by the acceptance of appointments on "well-defined, equitable, and business-like terms," but we fail to appreciate the direct application of such a remark to the hospital in question. We believe that the principle involved in the whole affair is pretty well understood by the profession, and that there is enough liberality towards the matter of opinion to allow every individual member to act as he chooses and bear his own responsibility. Any attempt, however, "to dictate public opinion," by any so-called "semi-secret club," is too absurd for sober consideration.

Reviews and Notices of Books.

THE CHOLERA EPIDEMIC OF 1873.

In accord with the joint resolution of Congress, of March, 1874, authorizing an inquiry into and report upon the causes of epidemic cholera, we have on hand an octavo of over 1,000 pages, of great value.

It consists, first, of an able essay by Dr. J. M. Woodward, U. S. N., showing the "connection of the mercantile marine with the importation of cholera into the United States, with suggestions as to the prevention or limitation of future outbreaks."

This is succeeded by the following reports:

I. History of the Cholera Epidemic of 1873 in the United States. By Ely McClellan, M.D., Ass. Surg., U. S. A.

II. History of the Travels of Asiatic Cholera. By John C. Peters, M.D., of New York. Ely & McClellan, U. S. A.

III. Bibliography of Cholera. By John S. Billings, M.D., Ass. Surg., U. S. A.

No brief notice can give adequate estimate of the value of the volume, and we shall only attempt an outline with short comments.

The essay of Dr. Woodward has the merit of direct clearness. It plainly sets forth the views of the author as to the assignation, propagation, conditions and limitations of the above. He has evidently made a very careful study of the subject. His views, therefore, are worthy of all the defence which belongs to close and ardent investigation, and yet are up for examination, rather than implicit endorsement. If his dicta are correct, we have made a stride in comprehending the disease, such as has been accomplished in reference to very few of the contagions.

His nine propositions may be thus briefly stated:

(*a*) Cholera is caused by the access of a specific organic poison to the alimentary canal, which is developed spontaneously only in Hindostan.

(*b*) Outside of Hindostan it is contained primarily only in the vomit, stools, and urine.

(*c*) Incubation is completed in from one to three days, to which alkaline nourishment is requisite, and a temperature favoring decomposition hastens it.

(*d*) Impure potable water, decomposing matter, with alkaline reaction, and alkaline contents in the intestines, favor the incubation of the poison.

(*e*) The presence of bacteria is the test of the poisonous period of the dejections.

The contagion, if dried during incubation, can be kept, and thus may be carried and introduced through air, saliva, water, or food.

(*f*) The poison is destroyed by the process of growth, or by contact with acids.

The specific character of the contagion of cholera being granted, Dr. Woodward very properly insists that every port should be informed, in advance of arrival, when there has been a shipment of passengers or goods from a cholera-infected district. This gives opportunity for the exercise of that vigilance which is generally rewarded with success. The masters of ships should have precise directions as to what to do in case

of cholera outbreak. It should be an axiom, that no diarrhœa is harmless during a cholera season. The true remedy, says Dr. W., against cholera, is preventive medicine. We would change the word "medicine" to measure or method.

We wish that we could be as certain as Dr. W. is, that "we possess in the mineral acids a certain means of prophylaxis against cholera," or that the appearance and disappearance of bacteria in excreta precisely mark their poison-period. We invite a careful study of the definite propositions of Dr. Woodward.

The clinical history of the epidemic of 1873, by Dr. McClellan, has all the value to be derived from close observation, and from a compilation of the clinical observation of manifold persons at different points, under varying circumstances and shades of type. The treatment shows all the shades that experience, fashion, and hopefulness in empirical prescription might suggest. If bacteria are tests of the time of contagion, the experiments of Nedswetzky, of Russia, are valuable as showing that chlorine water (chlorine, ℥ss.; aquæ, ℥ij.) and the mineral acids alone destroy them.

Various propositions, which nearly correspond with those alluded to by Dr. Woodward, are discussed, and similar opinions to those he presents arrived at. The time of incubation is not so definitely affirmed, and the presence of bacteria as a test of the poison-period not asserted. The contagion having been introduced, it is asserted that it is influenced by the hygienic condition of the people, and not by geological formation. No immunity is secured by one attack. It is loosely asserted that it rather predisposes to a second fatal one where there is survival at first.

Preventives of cholera are noted to be (*a*) recognitions of its infectiousness; (*b*) cleanliness, both of localities and individuals; (*c*) thorough disinfection, copperas, lime, and charcoal being especially designated; and (*d*) also great care as to dieting. Boiling, filtering, and treatment with permanganate of potash are especially noted. The diet directions are loose, and especially the assertion that wine, brandy, and malt liquors are extremely useful in moderation. The article of Dr. McClellan as a whole is excellent, but we regret to see here and there a sentence thrown in which lacks the precision which most of all we have a right to claim from those to whom Government gives special facilities for investigation.

The history of the origin and spread of the Asiatic cholera, which reached here in 1873, is very accurate and interesting. Dr. Peters shows excellent ability as a topographical historian of disease. Dr. McClellan's report as to its progress through the country is exceedingly well expressed, and the classification aids much in weighing the facts afforded by various collaborators. We have examined with interest the various testimonies of different observers. They furnish an amount of evidence which greatly aids in making up the medical history of the disease. The condition of Memphis, as reported by its health officers, is the same as that of most places where the disease proved largely epidemic. On an arrival, several cases may occur amid healthy conditions; but it does not spread in such localities very extensively, as a rule, if good hygiene abounds.

The history of the epidemics in North America, by Dr. McClellan, is also full of facts well collated and arranged. Each epidemic is treated separately, and its phenomena carefully noted. The Odessa Altenburg epidemic of 1865, which gave paternity to ours in 1866, is capable of accurate geographical description and tracing.

Dr. Woodward's report in reference to the army, shows how it spread by the movements of recruits. The history of its spread in India shows it often connected with the great festivals. No one can rise from the perusal of the book, without recognizing it as a perfect thesaurus of facts about cholera. Its careful reading is demanded by all who would study this disease thoroughly.

It is well indexed, and very many important facts can be found as to collateral causes of disease.

As to the Bibliography of Cholera by Dr. Billings, we only take exception to the idea "that the majority of readers will probably think that the magnitude of the work is much greater than its importance." If so, we pity that majority. It is a most valuable list, only too short, if it has left a single authority out. The study of cholera, like that of variola, is a typical study. Mastering it, we master whole groups of epidemics, and get a key to manifold specific diseases. Concentrated and exhaustive study upon such an epidemic schools us for laying hold of the depths of other similar studies, and so is far better than partial studies of less pronounced contagion. We well remember being in the American Medical Association, at Baltimore, within a dozen years, when great excitement was produced over the so-called *hypothesis* of specific contagion as the sole cause of cholera outside of India. In fact, medical opinion then regarded it as generally arising somehow *de novo*. Now, portability is known to be its chief, if not only, terror. It is through the close studies of pronounced and well-defined diseases that the medical world moves. A thorough differentiating diagnosis has more of treatment in its loins than we are apt to think. It is as true of diseases as of pestiferous animals, that their natural history is the first thing to consider, especially if we would put in operation effective limiting causes. We commend the whole book to the study of every lover of medical science, as well as every practitioner of medical art. When we first looked at its bulk, we were disposed to say that not expecting to meet a great cholera epidemic, we might afford to slip it in order to glean in more usual fields. But we arose from its perusal with the feeling that it teaches the law of epidemics, the importance of prophylactic treatment, and the results of prompt efficiency in managing disease, to a degree that may make us feel that the doctor is not armorless, even in the midst of assaults like those of fire, pillage, sword, and bombardment.

A Treatise on Therapeutics, comprising Materia Medica and Toxicology, with especial reference to the Application of the Physiological Action of Drugs to Clinical Medicine. By H. C. Wood, Jr., M.D., Prof. of Botany and Clin. Prof. of Diseases of Nervous System, Med. Dept. Univ. Penn., etc., etc. Second edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co. 1876.

By comparing the present with the first edition of this work, there are many evidences of very decided improvement. The author has modified his conclusions in regard to the therapeutical actions of many drugs, and some of these conclusions are of considerable importance to the searcher after practical facts. Many of the sections have been almost rewritten, as much in consequence of the necessity for condensing the original text to make room for new material, as for anything else. A number of new substances have been noticed which do not appear in the first volume, and many additional facts concerning the older substances which have been necessitated by more recent investigations. Everywhere our author has given evidence of his determination to keep up to the times, some of

the references being of the latest possible date consistent with their publication in the present volume. It is needless for us to say that we are well pleased with the work in every particular. With its present improvements it may be looked upon as ranking among the leading treatises on the subject.

A Practical Treatise on Fractures and Dislocations. By Frank Hastings Hamilton, A.M., M.D., LL.D., Surgeon to Bellevue Hospital, N. Y., etc., etc. Fifth edition, revised and improved. Illustrated with three hundred and forty-four woodcuts. Philadelphia: H. C. Lea. 1875.

The reputation of this treatise is so well established that it is unnecessary to say anything in the way of general commendation. It still remains the only complete treatise on Fractures and Dislocations in the English language, and in fact in any language, if we except Malgaigne's work, which was published as long ago as 1847.

The present edition contains many marked improvements over its predecessors, to some of which we would call attention. To the already large number of illustrations thirty more have been added. The first of these, on page 181, is an original one, and gives a very correct and comprehensive idea of the usual point of fracture of the clavicle, and of the action of the muscles upon the fragments, and especially explains the effect of posture on Moore's dressing. At page 131 is introduced Kingsley's apparatus for the treatment of fracture of the lower jaw, the application of which allows of free motion of the organ during treatment. Where this latter is indicated, the apparatus in question is probably the best that has so far been devised. The author's new method of dressing fractures of the clavicle is presented on page 207, and has the merit of simplicity, if not of effectiveness. And after all, in view of the complicated apparatus that is advised for the prevention of deformities after this fracture, anything which tends towards such simplicity, and with a reasonable promise of practical utility as well, is a real improvement. Moore's theory in regard to the separation of the epiphysis of the humerus is referred to on page 233, but does not receive the unqualified endorsement of our author. One or two cases, however well observed or authenticated, are hardly sufficient to establish a radical principle. Among other new illustrations we also notice those on page 291, showing the varieties of form in which Colles's fracture may occur. An interesting case of intra-capsular fracture, caused by a blow upon the trochanter, is given, together with a woodcut. The relative merits of plaster-Paris dressing and extension with weight and pulleys in the treatment of fractures of the thigh, are quite fully discussed. Our author has taken a considerable amount of pains to express a general preference for the latter, an opinion that will, we doubt not, be shared when the present fashionable treatment shall have sunk to its deserved level. Although taking grounds against the use of plaster as a *sine qua non*, he recommends it in some forms of fracture of the femur and leg. A remarkable result of the plaster Paris treatment is presented by Dr. Gibbes's case, in which the limb was shortened until it was arrested by the lower fragment resting against the neck. We are glad to bear testimony with our author to the effect that the extension with weight and pulley has made more perfect limbs than any other method yet devised.

We have striven to give our readers some idea of the additions in the new edition, and in conclusion we would state, that as a whole the work is in every particular so fully up with the requirements of the times as to leave nothing to be desired.

A System of Midwifery; including Diseases of Pregnancy and the Puerperal State. By Wm. Leishman, M.D., Regius Prof of Midwifery, University of Glasgow, etc. Second American from second revised English edition, with additions by John S. Parry, M.D., Obstetrician to the Philadelphia Hospital. Philadelphia: H. C. Lea. 1875. 8vo, pp. 743.

In noticing the second edition of this work, it is only necessary to speak of the additions and alterations which have been made to the first edition. Notably the most important of these are to be found in the Physiological Lectures, and in the chapters on Puerperal Fever. The editor has added some remarks on the use of the forceps, already admirably presented by the author, and also upon lactation and puerperal disease, and the modifications of obstetrical instruments in this country. As a general work upon the subject, it will be found a valuable addition to the library.

Reports of Societies.

NEW YORK COUNTY MEDICAL SOCIETY.

Stated Meeting, December 27, 1875.

Dr. H. B. Sands, President, in the Chair.

EFFECTS PRODUCED UPON THE BLOOD OF SYPHILITIC PATIENTS BY TREATMENT WITH MERCURY.

The interest of the paper read by Dr. E. L. Keyes upon the above subject centred upon his conclusions from a series of observations with reference to the effect produced upon the *number of red blood-globules* by the administration of mercury in the treatment of syphilis. With regard to the value of mercury in the treatment of syphilis, Dr. Keyes assumes the following position: that syphilis is most surely controlled and most often cured by the unremitting use of small doses of mercury, just enough to restrain the symptoms without producing any conscious physiological effects, and continued for not less than two years. The drug may be pushed if symptoms seem to demand it, is often continued more than two years, and may be assisted by iodide of potassium. The opinion was expressed, that when a syphilitic patient in fair health is treated in this manner from the period of his first eruption, he may be so cured that he will have but one general eruption, and no serious lesion subsequently; that the health of such a patient will be as good after as before such treatment, and that the exceptions to the rule are not numerous. At this point reference was made to the statement of Liégeois, namely, that small doses of corrosive sublimate increase the weight of healthy men or animals. This statement has been sustained by the clinical observation of Dr. Keyes.

Reference was also made to the results obtained by Ricord and Grassi in the examination of the blood of syphilitic patients while they were being treated with mercury. The clinical experience of Dr. Keyes had seemed to contradict the result obtained by those observers. Wilbouchewitch, in an article published in 1874, gave us his conclusions with regard to the effects produced upon the blood in the early days of

syphilis by treatment with mercury. But Dr. Keyes was of the opinion that this observer had formulated his treatment for syphilis upon an erroneous interpretation of facts, and proceeded to show how his conclusions were worthless. Again, reference was made to the report of Dr. J. Hughes Bennett, in which the fact was stated, although no note made of it, that dogs increased in weight while taking small doses of mercury. In the light of the observations made by the gentlemen mentioned, Dr. Keyes began a series of experiments which extended over a period of six months, and were made upon persons in health, hospital patients, and patients in private practice. The blood was taken from 27 individuals, of which six were apparently sound and 20 were syphilitic. Only three hospital cases were used, and in them the count was made chiefly for comparison. The blood was counted 101 times, and from 5 to 10 counts made each time. The instrument used is called a *Hématimètre*. All the methods of actually counting the blood cells, to which reference has been made by writers upon this subject, whether for red or white cells, have had the defect of not accurately establishing the count for a given volume of blood. The first recorded instance where accuracy was aimed at was reported by Cramer, but his process was a rough one. Reference was made to the instruments which have been used, and a description given of the instrument employed in his own observations. The fluid used to dilute the blood for counting was made as follows: Take urine, neutral, slightly phosphatic, about 1020 sp. gr., and make of it a saturated solution with borax. Filter, and there is left a fluid with sp. gr. about 1030, which is to be diluted with water until reduced to sp. gr. 1020. The following was regarded as a better fluid, but the corrosive sublimate may render it objectionable. Take of urine, neutral or slightly alkaline, sp. gr. 1020, filter, and add gr. v. of corrosive sublimate to the ounce, subsequently decant, and reduce with water to sp. gr. 1020.

In the labor of the experiments Dr. Keyes was assisted by Dr. A. L. Stimson, and observations relating to the following points were noted:

1. *Average of red blood-corpuscles in 1 cubic mm. of blood of the healthy adult male.*—A high average is 5 millions. Anæmia rarely goes below 3 millions, and in five instances the count reached above 6 millions.

2. *Effect of small doses of mercury upon the blood early in syphilis.*—In all the cases counted, the number of the red blood-corpuscles increased under the influence of mercury, good hygiene, and tonics.

3. *Effect of the long-continued use of small doses of mercury upon the blood in syphilis.*—There were three cases: the drug was administered respectively, eleven, six, and eighteen months; the blood-count was above the healthy average, and clinically they were all in excellent health.

4. *Effect of mercury in excess upon the blood in syphilis.*—In this, the only case in which salivation had been present (produced for special reasons), the count showed a loss of one million, which was attributed to the excessive use of mercury.

5. *Effect of mercury combined with iodides upon the blood in syphilis.*—In this list it would be fair to expect frequent exceptions to the rule, that mercury increases the number of red corpuscles in the blood of syphilitic patients, because so many who need prolonged treatment late in the disease become more or less cachectic and depreciated in general health, but in only two out of the nine cases under this head did the average count fall below the normal standard, and this among patients who had had syphilis for a long time.

6. *Effect of mercury upon the blood in syphilis in hospital cases.*—There were three cases. One entered salivated, and his count increased after he began to eat. One showed a wretched count, was debilitated by disease and hospitalism, but improved under the influence of good hygiene and tonics, and it was believed that the mercury also helped him.

7. *Effect of small doses of mercury upon the blood of individuals not syphilitic.*—The observations showed an increase in the count. In testing the effect of small doses of mercury, Dr. Keyes used the protiodide in granules, gr. $\frac{1}{4}$ each (the preparation more commonly employed by him in the treatment of syphilis); and, as every person's capacity for the drug varies, one granule was administered after each meal, and increased by one granule each day (not dose) on every fourth day, until some evidence of irritation was developed, when the dose was at once reduced to one-half, and there continued at the option of the doctor. The conclusions arrived at have in the main been already given; but the following may be added to make the report more complete:

1. Mercury decreases the number of the red cells when given in excess, especially in hospital patients.

2. Syphilis diminishes the number of red cells below the healthy standard.

3. Mercury in small doses continued for a short or long period in syphilis, given alone or with iodide of potassium, increases the number of red blood-corpuscles, and maintains a high standard of the same.

4. Mercury in small doses acts as a tonic upon healthy animals, increasing their weight. In larger doses it is debilitating or fatal.

5. Mercury in small doses is tonic (for a time at least) for individuals in fair health, not syphilitic. In such individuals it increases the number of the red blood-corpuscles.

The paper being open for discussion, Dr. Bumstead remarked that he regarded the results reported by Dr. Keyes as being of very great importance, and complimented the zeal with which the work had been pursued. The only criticism which he would venture was, whether the effect produced by mercury upon a healthy individual can be taken as a standard of the effect which will be produced by mercury upon an individual suffering from syphilis.

With reference to the results which follow a long-continued use of mercury in the treatment of syphilis, his experience had differed from that of Dr. Keyes.

Formerly he had treated syphilis according to the plan of administering mercurials for six months, perhaps a year, and following with iodide of potassium, which was to be continued for two or three months. The results obtained by this plan of treatment had, in his hands, proved very unsatisfactory.

Latterly the plan of treatment which he has more frequently adopted consists in the vigorous use of mercurials for limited periods of time, and then the allowance of an interval during which no remedy, except it may be a simple tonic, is taken. After a certain length of time, variable somewhat in different cases, a return is made to the mercury, when it is again pushed with considerable vigor. Dr. Bumstead preferred this course to the prolonged use of mercurials in small doses, as recommended by Dr. Keyes, and also by Jonathan Hutchinson, of London. With regard to the excessive use of mercury in the treatment of syphilis, such cases are rarely seen at the present time.

Dr. H. G. Piffard remarked that the difference in conclusions arrived at by Wilbouchewitch and Dr. Keyes was not so broad as might at first seem, for

both observers have proved that mercury increases the number of red blood-corpuscles. Wilbouchewitch, however, administered larger average doses than Dr. Keyes, and it is quite possible that if both had used doses of the same size, they would have arrived at the same conclusions. The only difference, as their conclusions now stand, seems to be that W. claims a *diminution* in the number of red corpuscles when mercury has been too long continued, while K. has shown that an *increase* takes place. The field in which the experiments were made perhaps may also assist in accounting for this difference. Dr. Piffard referred to the fact that the white corpuscles can be much more readily counted when the blood upon the slide has been tinged with anilin. The effect produced is twofold: 1st, the white corpuscles are colored so that they are more easily recognized; and, 2d, the red corpuscles are in some way cleared out of view, leaving only the colored white corpuscles in the field. The doctor also referred to the value of the count as a means of diagnosis.

Dr. Otis remarked that although he had not had any experience with reference to the precise labor embodied in the paper read by Dr. Keyes, yet he regarded the results as an important step towards a more successful plan of treatment for syphilis than perhaps we have yet had. Mercury has been used in the treatment of syphilis rather as an antidote than otherwise, for the reason that the exact nature of syphilis was not known. It is now known that a notable increase of white blood-corpuscles is present in the blood of a syphilitic patient, and what we wish to do in the way of treatment is to get rid of this accumulation of cell elements, which constitutes one of the manifestations of syphilis. Anything that can be administered to the patient, which will clear his blood of this abnormal accumulation of white cells, will give him the most benefit.

We do not wish then to find an antidote, but something which will eliminate from the system that poison which manifests itself in an increase of these elements in the blood.

Now, mercury is known to have the power of producing fatty degeneration of healthy tissue. If it will accomplish that, we can understand how it will attack material not of a healthy nature; and we now know that when it is administered in small doses it will eliminate this material quietly, gradually, and finally clear it entirely out of the system. If any other remedies shall be found which possess the same power, or which shall meet the requirements more effectually than mercury, very well. But, in studying the effects produced by remedies, the labors of Dr. Keyes will lend a practical and positive view to their use in contradistinction to the empirical method of treatment which has heretofore obtained.

Dr. R. W. Taylor remarked that the practical value of the paper by Dr. Keyes consisted in the indisputable proof which it carried regarding the innocence of mercury when properly and carefully administered, and the beneficial effect it can produce in the treatment of syphilis.

Dr. Taylor then referred to a series of experiments which he had instituted with reference to testing the value of mercury in the treatment of those cases of syphilis in which fever is present. Syphilitic fever occurs in about one in six cases. He had found that the fever was subdued and tissue change arrested more promptly by the use of mercury than any other remedy used, and the general nutrition of the patient was at the same time improved. Quinine in large doses, iodide of potassium, iron and quinine were all used in different cases; but there was not that decided fall in temperature following their use, as was seen after the use of mercury. These facts will go hand in hand with the observations made by Dr. Keyes, which confirm the value of mercury in the early part of the secondary stage of syphilis. With regard to the use of small doses of mercury, and continuing them for a long time in the treatment of syphilis, he was fully convinced of the truthfulness of the remarks made by Dr. Bumstead.

In order to obtain the best effect of mercury in the treatment of syphilis, it should be omitted for a certain length of time and then resumed. The patient in the interval ceases to become accustomed, as it were, to the use of the drug; and, even though manifestations of quite an active character are present upon the skin, the disease will be more quickly and thoroughly eradicated, by dropping the mercury at times and allowing the patient to go on with tonics and general hygienic observances. With such intervals in the administration, mercury can be employed and a much more marked effect produced than can be obtained by its administration in any other manner.

Dr. O'Sullivan referred to two cases of syphilis in which a perfect cure, apparently at least, was effected by the long-continued use of $\frac{1}{24}$ grain doses of the bichloride of mercury, combined with iodide of potassium, and given three times a day. The size of the dose was believed to be remarkably small.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, December 8, 1875.

Dr. F. Delafield, President, in the Chair.

RUPTURE OF THE HEART.

Dr. R. E. Van Geison, of Greenpoint, N. Y., presented a heart with the following history:—

Mr. F., a very robust man of 65 years, who, from his own account, was "never sick in his life," after leaving the bedside of a dying son was taken on the morning of Nov. 19 with vertigo and vomiting. I found him in bed at 9 A.M., feeling better. Nov. 23d, I was again sent for. Found him up, but complaining of severe pain over cardiac region. Prescribed anodynes, and he soon obtained relief. Nov. 25th, he again sent for me. He had suffered all night from the pain in his chest again. Pulse 100. Murmur over the heart not well defined, seemingly aortic. At 9 A.M. prescribed opiates. At 9 P.M. found him comfortable. Had taken a little food. He expressed to his friends at 10 P.M. that he felt as well as ever. He slept until one o'clock, and then arose to urinate. He spoke cheerfully to his wife; said he felt quite well, and thought he should pass a comfortable night, and then springing into bed quickly dropped over dead.

Post-mortem held Nov. 28th, 9 P.M.

The lesion was one of rupture, apparently due to thinning of the walls from fatty degeneration. On examining the internal surface of the arch of the aorta, there were found small patches of atheroma.

Dr. Van Geison remarked that he had seen but one other case of the sort, which occurred during his naval service. The patient was a gunner, by the name of Ripley, who while asking his comrade for some tobacco, suddenly fell and died immediately. An examination in that case revealed a rupture of the left ventricle, due to the extreme thinness of its walls.

He presented a second specimen, which was of great interest in clearing up what would otherwise have been a very unsatisfactory diagnosis. The Doctor was called

very suddenly, about ten days before, to a typhoid-fever patient, who was at the time suffering from extreme dyspnœa. He found him just recovering from an attack of dyspnœa. His body was cold and clammy, pulse feeble, and it seemed as if he were in articulo mortis. With the aid of a little stimulant he rallied, and passed the night quite comfortably. The following morning he had had no recurrence of the dyspnœa, and his fever symptoms were progressing regularly. The lungs and heart were very carefully examined, but nothing was found to account for the strange phenomenon of sudden dyspnœa. About an hour after the doctor's departure, the patient was seized with another fit, but soon rallied. It was suggested that the dyspnœa might be caused by the accidental lodgment of a crumb of bread in the glottis, but his wife remarked, in combating this opinion, that the fits did not come on after eating, but while the patient was in a sound sleep.

At the end of the week, while in a coughing fit succeeding an attack of dyspnœa, the patient discharged a carious tooth, which cleared up the diagnosis at once. The tooth in question was attached to the gum by a mere shred, and had finally escaped into the throat, probably during sleep.

Dr. Van Geison, in further allusion to his first case, remarked upon the length of time which had elapsed from the initial symptoms to the death. It would seem that the rupture had commenced by a slight leakage, and finally killed the man by an overwhelming flood. The pericardium was partly filled with fluid blood, but contained no clots. In Ripley's case the blood was firmly coagulated around the heart, taking as it were a complete mould of the organ.

Dr. Beverley Robinson asked if the clot in the latter case was ante or post mortem.

Dr. Van Geison presumed that the coagulation was post mortem, as the man died instantly.

Dr. Robinson in this connection referred to the statement made that ante and post mortem clots can be distinguished by the presence or absence of the mould of the semilunar valves upon the clot.

Dr. Delafield remarked that we occasionally meet with some cases of death from rupture of the heart in which there are symptoms for several days before death. In those instances the rupture is gradual, and is oblique in its direction. In the case in question, however, the rupture was very direct, and any such explanation of the preceding symptoms could not obtain.

Dr. Loomis thought that the preceding attacks were due to failure of the heart powers. If there had been any escape of blood at first into the pericardium, the patient would have suffered from pericarditis; as it was, he had only the usual symptoms of fatty heart.

DIPHTHERIA.

Dr. A. H. Smith presented the larynx and portion of the trachea removed from the body of a medical gentleman, aged thirty-two years, who died of diphtheria on the Saturday morning previous. His illness was of ten days' duration, and during its earlier part it partook of the character of membranous sore-throat, so much so that the patient gave himself no treatment for three or four days. At the end of that time the membrane formed very rapidly upon the pharynx, uvula velum and tonsils. Then the larynx became involved, when it was also evident that the disease had extended into the air-passages lower down. He was finally tracheotomized at his own urgent solicitation, rather than in accordance with the convictions of Drs. Jacobi and Beverley Robinson, who saw the case in consultation. Dr. Smith performed the operation, with the immediate effect of relieving the dyspnœa, but the patient died four or five hours afterwards, apparently as much from the extreme exhaustion of the general poisoning as from interference of the respiration.

The specimen showed a false membrane lining the larynx and trachea, thicker in the latter. The membrane extended as far as the specimen could show, and doubtless existed in the bronchial tubes, although the circumstances of the case precluded the opening of the chest.

Dr. Smith also exhibited a section of skull removed from a dissecting-room subject, which showed a solid bony frontal sinus.

SIGNIFICANCE OF ENLARGED GLANDS.

Dr. Robinson asked concerning the significance of enlarged glands about the neck in diphtheria.

Dr. Smith replied that in connection with his case they were tender, but not enlarged.

Dr. Robinson remarked that some authorities maintain that there is a direct anastomosis of the lymphatics of the tonsils with those of the neck. If this were a fact, a very important element in diagnosis would be established, and would explain the fatal character of such cases as are attended with much swelling of these glands. The weight of authority favored the statement that the fatal cases were almost always attended with this state of things.

Dr. Van Geison remarked that the practical fact remained, that in the majority of the cases of fatal diphtheria these glands were not at all involved. In regard to this point he spoke without hesitation, his experience in this disease being quite extensive.

Dr. Robinson maintained that Dr. Van Geison's experience was contrary to his own and to the greater number of authorities on the subject. In thirty or forty post-mortems of children who had died of the disease, the existence of swollen glands was very marked.

Dr. Van Geison remarked that far from attaching any grave importance to the glandular swellings, he was almost willing, in consequence of their existence, of giving them a favorable prognosis. In the toxic form of the disease the glandular swellings were not present, and in all those cases death, according to his experience, was certain. This accorded with the experience of the members of the Kings County Medical Society, as given recently in a discussion upon the disease.

Dr. Loomis thought that the apparent discrepancy in the statements of the two preceding gentlemen could be explained by a difference in the type of disease. In the earlier cases he was confident that the fatal cases had glandular complications as a rule, but that the latter ones presented an opposite condition of things.

Clinical Teaching in Paris.—There has of late years been a well-grounded complaint of the paucity of clinical instruction in the Parisian school, and the latest reports say that measures have been taken to remedy this defect. Chairs are to be created for the clinical teaching of syphilis, diseases of the skin, ophthalmology, otology, mental diseases, and odontology, which will be established at the different general hospitals already in existence, and placed under the direct control of the Faculty, which will have the right to appoint its own professors. The appointment is for ten years, with the power of re-election, and the salary is 5,000 francs *per annum*.

Correspondence.

PRESBYTERIAN HOSPITAL AFFAIR.

To the Editor of The Medical Record.

Dear Sir:—In the last number of The Record you venture upon an interpretation of the principles of the eleven applicants for appointment to the Presbyterian Hospital. I cannot speak for all, but so far as one of them is concerned, you are in error.

I have applied for, and hope to have the opportunity to hold an appointment in that hospital, on the same terms on which all other physicians hold their professional appointments, whether as family doctors, examiners for insurance companies, or physicians to corporations (hospitals included, disguise it as you will); that is, on good behavior. And in that term I include not merely the observance of the code of ethics and the avoidance of insanity, as one of your correspondents would have it, but also the exercise of that tact and courtesy which we expect to find in successful men generally, and the absence of which has been so conspicuous in the whole of this affair.

Permit me to add, that the dignity of the profession, about which we are all so properly solicitous, is in less danger of being lowered by the acceptance of a half-dozen appointments on well-defined, equitable, and business-like terms, which offer rewards as well as penalties, than it is by ill-bred sneers at ladies, by childish fits of temper over real or imaginary wrongs, and by an absurd pretension on the part of a score or two of young men organized as a semi-secret club to the right to dictate public opinion on all questions, and to determine the reputation and standing of individuals.

One of the Eleven.

New York, *January* 3, 1876.

CHANGES IN THE PUBLIC SERVICE.

ARMY.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from Dec. 26th to Dec. 31st, 1875.

White, Chas. B., Surgeon.—Assigned to duty at Columbus Barracks, Ohio, as Post Surgeon. L. O. 264. A. G. O., Dec. 17, 1875.

Merrill, J. C., Assistant Surgeon.—To report to Commanding General, Department of Texas, for assignment to duty. S. O. 264, c. s., A. G. O.

Rosson, R. L., Assistant Surgeon.—Assigned to duty at Camp McDowell, Arizona Territory. S. O. 108, Department of Arizona, Dec. 11, 1875.

Society of Neurology.—At the Annual Meeting of the New York Society of Neurology, held December 29th, the following officers were elected for the ensuing year:

President, D. B. St. John Roosa, M.D. Vice-President, Wm. H. Draper, M.D. Corresponding Secretary, Alfred L. Carroll, M.D. Recording Secretary and Treasurer, A. McLane Hamilton, M.D. Curator, Edward G. Janeway, M.D. Councillors, J. C. Dalton, M.D.; Austin Flint, Jr., M.D.; H. D. Noyes, M.D.; John J. Mason, M.D.

Medical Items and News.

New Medical Weekly in London.—We understand that a new weekly medical journal is being started in London, under the editorship of J. Milner Fothergill. The first number will appear during the present month.

The Chicago Journal of Nervous and Mental Diseases is to drop the "Chicago" and will be published in both New York and Chicago simultaneously.

The New England Psychological Society is the name of a new organization started by Dr. B. D. Eastman, of the Worcester Lunatic Hospital, and embracing the superintendents of similar institutions in the New England States. Pliny Earle, M.D., of the Northampton Lunatic Hospital, is the president, and Dr. Eastman, the secretary and treasurer. Meetings are to be held quarterly, the next one being at Worcester, on the third Tuesday in March, 1876.

The Late Professor Jüngken, of Berlin, bequeathed his collection of instruments to the Augusta Hospital of that city.

A New Sphygmoscope has been brought to the notice of the profession by Dr. E. A. Pond, of Rutland, Vt., which consists of a glass tube with a small bore, in which an index of colored fluid rises and falls with the pulse, as the large end of the tube covered with delicate rubber is made to press on the artery.

Anatomical Material in London Schools.—Some English journals are complaining of the scarcity of material for dissecting in London, none of the schools, it is said, having yet received more than half the subjects necessary to supply the men waiting to dissect.

Francis Edmund Anstie.—The inscription written by Mr. John Simon, F.R.S., to be engraved on a tablet in the Chapel of King's College, London, commemorative of the late Dr. Anstie, is as follows:

"In memory of Francis Edmund Anstie, M.D., London, F.R.C.P., Physician to the Westminster Hospital, Honorary Fellow of this College. Laborious in study, accomplished in practice, ardent in love of truth and justice, strenuous in efforts for the poor and friendless, he was stedfast, gentle, and affectionate in all personal relations, and dearest to those who knew him best. His death, which took place on September the 12th, 1874, in his 41st year, was caused by blood-poisoning incurred in the discharge of his duty."

Weekly Bulletin of the Meetings of Medical Societies.

[The Medical Record *is published every Saturday. Notices of meetings, lectures, operations, etc., intended for publication in this bulletin should be received at the office, 27 Great Jones Street, one week previous, to insure their appearance.*]

Tuesday, Jan. 11.—East River Medical Association. Election.

Wednesday, Jan. 12.—N. Y. Pathological Society. Coll. of Phys. and Surg., 23d st., cor. Fourth avenue. Election of officers.

Friday, Jan. 14.—N. Y. Medical Journal Association. "Rachitis," Dr. S. M. Roberts.

Original Lecture.

THE INFLAMMATIONS AND THE CONGESTIONS OF THE NON-GRAVID UTERUS.

PRELIMINARY LECTURE,

By E. R. PEASLEE, M.D., LL.D.,

PROFESSOR OF GYNÆCOLOGY IN BELLEVUE HOSPITAL MEDICAL COLLEGE.

Part III.

Gentlemen:—Having considered the principal obstacles to the correct understanding of my subject, I next call attention to the fact that the cervix and the corpus uteri are, in relation to it, to be mainly regarded as independent organs; and propose a more definite anatomical nomenclature of their different parts than has hitherto been suggested.

1. Recurring to the primal development of the uterus, we find that one-half of the body, and the same half of the cervix (the organ being bisected antero-posteriorly), are developed from the same embryonic source—Müller's duct—these halves subsequently meeting and blending on the median line. But the cervix is proportionately much larger at first, and so remains till puberty, since it constitutes, as it were, the basis or nucleus of the future uterus. It is therefore also firmly attached to the contiguous parts; while the body is not needed, and therefore not developed till puberty arrives.

Developmentally, therefore, the corpus and the cervix are one and the same organ.

2. Histologically, also, they are identical, being composed of the same structural elements—muscular and areolar (connective) tissue, with vessels and nerves. And they constitute but a single organ anatomically; the longitudinal fibres of the corpus being prolonged into the cervix, both anteriorly and posteriorly, and rendering the two portions inseparable by dissection.

3. But *physiologically*, the corpus and the cervix are quite independent. The normal secretion of the cervical canal is entirely unlike that of the uterine cavity; and the two great functions of menstruation and of gestation are confined exclusively to the latter, the cervix not at all participating. Parturition also is effected by the corpus uteri, not only unaided but even resisted by the cervix, whose resistance the corpus finally overcomes. The cervix is, in fact, the sphincter muscle of the uterine cavity, and therefore also prevents premature delivery.

4. *Pathologically*, also, the cervix and body of the uterus are, to a notable degree, distinct. Inflammation and congestion are very often confined to the cervix, or to the corpus, alone; and certain diseases almost always attack one of these parts to the exclusion of the other; as fibroids are mostly developed in the corpus, and carcinoma and epithelioma in the cervix. In general, the latter is more liable to disease than the corpus, and especially in the imparous woman, since in her the cervix has attained almost to its full development and vascularity, while the corpus does not till at the end of gestation. But after the return of the pregnant uterus to nearly the same size as before pregnancy, the corpus still remains far more vascular than before, and far more liable to certain pathological conditions. It will therefore be necessary, when I come to speak of the inflammations and the congestions of the uterus, constantly to point out their different symptoms and effects in the parous and the imparous woman. It will be seen that the question is not whether the woman is married or a virgin, but whether she has or has not been pregnant; or, in other words, has the uterus been, or has it not been, developed beyond the virgin state by gestation. If gestation has obtained, and parturition, whether at term or at any previous time, has occurred, I shall speak of her as a parous woman; if pregnancy has never occurred, she is of course imparous.

5. There is, however, a therapeutical interdependence of the corpus and cervix uteri; or rather a dependence of the former upon the latter. Hence remedies applied to the cervix may be found to act upon the corpus, not only by reason of the continuation of the tissues of the one into the other, but also because many of the vessels and nerves of the corpus are first sent to and through the cervix. Especially evident is this in the use of scarifications of the cervix, and in the application of leeches, suppositories, or powerful counter-irritants.

The pathological independence of the cervix and corpus uteri just illustrated necessitates a more precise and distinctive nomenclature than has hitherto been adopted; and I propose the following terms, both anatomical and pathological, as having been used in my public lectures for the last eight years.

A. The corpus uteri consists of three distinct layers from without inwards:

(*a*) The perimetrium* (or serous layer), covering the entire corpus, and also the supra-vaginal portion of the cervix posteriorly.

(*b*) The metrium, including the muscular and the connective tissue.

(*c*) The endometrium—the mucous membrane lining the uterine cavity.

B. The cervix also has three layers from without inwards:

(*a*) The peritrachelium,†—the mucous membrane covering the whole of the vaginal portion, but wanting on the supra-vaginal.

(*b*) The trachelium, including all the muscular and connective tissue of the cervix.

(*c*) The endotrachelium—the mucous membrane lining the cervical canal.

Thus the endometrium, the endotrachelium, and the peritrachelium constitute the entire mucous element of the uterus; and the metrium and the trachelium, the parenchyma, so-called, of the corpus and the cervix respectively.

The nomenclature of the diseased conditions should, of course, correspond with the anatomical terms; and we recognize three inflammations of the corpus and three of the cervix, viz.:

I. *Of the corpus.*—Perimetritis, ‡ metritis, and endometritis.

II. *Of the cervix.*—Peritrachelitis, trachelitis, and endotrachelitis. §

The accompanying diagram illustrates the application of the terms just given.

There are also, with reference to their locations, six different congestions of the uterus, viz.:

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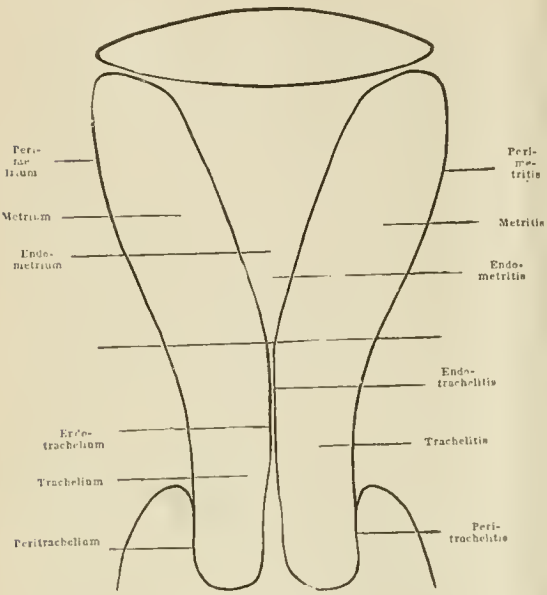
* From περί, *around*, and μήτηρ, uterus. This term and endometrium have now become familiar.

† From περί, *around*, and τράχηλος, the neck.

‡ This term is used in an indefinite way by Dr J. M. Duncan, as synonymous with pelvic peritonitis; while parametritis was selected by Virchow for pelvic cellulitis. Metritis is now familiar, but not as here defined and restricted. Endometritis has been in use for about fifteen years.

§ Termed endocervicitis by some writers; a barbarous compound of Greek and Latin.

Of the corpus.—The perimetric, the metric, and the endometric.



Of the cervix uteri.—The peritrachelic, the trachelic, and the endotrachelic.

These congestions I next proceed to consider.

THE CONGESTIONS OF THE NON-GRAVID UTERUS.

These will be considered before the inflammations, since they are vastly more common and more important. Besides, the latter are generally preceded by congestion, for a longer or shorter time, as their predisposing cause.

Active congestion of the uterus during the menstrual period, and for two or three days before and after it, is a normal condition of that organ; but when it or the passive form further trenches upon, or extends through, the intermenstrual interval, it becomes a pathological state, and demands appropriate treatment.

Thus explained, uterine congestion is found to be the most common affection of the uterus; and probably, indeed, is more frequent, when found alone and when complicated with other affections, than all the others counted together. Moreover, it may exist, not only for months, but for many years, even through the thirty years of menstrual life; thus entailing a greater amount of suffering in the aggregate than any other disease to which woman is liable, until the health is irremediably ruined.

It is therefore singular that its existence has hitherto been almost entirely ignored; while it is universally conceded that all other vascular organs are subject to congestion. With the sole exceptions of Dr. Chapman, whose work was published in 1872, and Dr. Barnes (1874), no gynecological author has recognized congestion of the uterus as a pathological condition requiring any special treatment;* though by several the phrases "active congestion" and "passive congestion" have been incidentally used, as admitting its possible or actual existence. But most writers have ignored its existence entirely.

But the reason for this omission has already been explained; and was also stated by myself in a discussion upon chronic metritis, in the New York Academy of Medicine, in 1866, in language to the following effect:

"I desire here to make a plea for the uterus, and defend its right in common with all other very vascular organs to become congested—a right which all authors up to the present time, and the speakers on this occasion, deny or ignore; and to assert that chronic metritis, so-called, is nothing more, nothing less, and nothing else, than chronic uterine congestion, with its results." I also now add, that the uterus is far more liable than any other organ to become congested pathologically and chronically—the ovaries even not excepted; as might be expected, *a priori*, of an organ which is habitually congested at least seven days in each month, or about one quarter of the time.

* Some slight attention had previously been called to uterine congestion by Ashwell, Simpson, and Grailey Hewitt only; of whom Ashwell alone alluded to its treatment, and this in but a dozen lines. Dr. Barnes devotes four pages to congestion and its treatment (pp. 429–433). None of these writers distinguish between active and passive, or recent and chronic congestion, nor indicate the particular part of the uterus which is congested in particular cases.

Original Communications.

REPORT OF A CASE OF PERITYPHLITIC ABSCESS IN THE ILEO-CÆCAL REGION,

TREATED SUCCESSFULLY BY THE EARLY ESTABLISHMENT OF AN EXTERNAL OPENING IN THE ABDOMINAL WALLS FOR THE ESCAPE OF PUS.

By GURDON BUCK, M.D.

Mr. J. M., æt. 26, of Liverpool, of good constitution and regular habits, being in good health and free from any premonitions of the attack that was impending, returned on Monday, Nov. 8th, 1875, to the city from Philadelphia, by an early morning train, took his ordinary dinner at half-past six in the evening, and retired to rest at about eleven o'clock. After a good night's sleep he was awakened in the morning of Tuesday, 9th, by pains in the right iliac region, which he described as a peculiar sensation rather than pain, and which he feared might be the precursor of an attack of colic such as he had experienced on two previous occasions, but at remote periods. He had two small loose evacuations following each other after a short interval. Hoping to obtain relief by provoking vomiting he drank freely of hot water, which he rejected unmixed with other substances. The pain increasing in severity he resorted to hot fomentations. At 9 o'clock he was visited by Dr. G. H. Wynkoop, who prescribed six grains of calomel and administered a hypodermic injection of Magendie's solution of morphia, and repeated it a second time, later in the day. The same evening, about twelve hours after the attack, I made my first visit, and found him suffering from very severe pain in the right iliac region, which had persisted all day. He had vomited two or three times some bilious matter subsequent to the vomiting produced by taking hot water in the morning. There was no febrile heat nor acceleration of the pulse, nor had there been any rigor. The abdomen was supple, but extreme tenderness on the slightest pressure existed over a spot that could be covered with the thumb at a point three fingers' breadth distant from and to the inside of the anterior superior spinous process of the right ilium, and on the same level

with it. The tenderness diminished in a marked degree as the pressure receded from this circumscribed spot. Suspicion of the existence of a lesion of the vermiform appendage was excited. Without delay one dozen leeches were applied, and followed by hot fomentations.

Second day, at 9.30 A.M.—Visited Mr. M. with Dr. Wynkoop, and found him still suffering severe pain by paroxysms, and with the same exquisite tenderness on pressure over the spot already indicated in the right iliac region. He had had a shiver, lasting ten minutes, since daylight. Pulse had risen to 106 and temperature to 101°. A second application of six leeches was made, and poultices were continued. A narcotic treatment was now instituted. Magendie's solution of morphia was directed to be taken, 15 minims every hour, till narcotism was produced, and thereafter to be continued every two hours. At 7.30 P.M., patient was more comfortable and suffering less pain; there was less tenderness on pressure; he had not vomited for 24 hours past. Pulse was reduced to 86. Temp. 100⅘°. A moderate degree of narcotism has been maintained by 75 minims of Magendie taken since morning.

Third day, at 9.30 A.M.—Has passed a comfortable night without severe pain; tenderness on pressure is less marked; its locality, however, is unchanged; has vomited bile. During our visit he had an attack of severe colic pain, diffused over the abdomen. The abdominal muscles were tense and retracted; pulse 98. Temp. 99° to 100°. Has taken 60 minims of Magendie through the night, up to eight o'clock this morning. Ordered enema of infusion of catnip and the use of the catheter to relieve fruitless efforts at urination. Ordered to take calomel, gr. x.

At 7.30 P.M., patient somewhat relieved after the operation of the enema; has succeeded in urinating. The abdomen has now became tumid. Local tenderness not increased; the surface of the body is moist. Dysuria persistent. Pulse 98. Temp. 99°. Morphia has been taken in increased quantity through the day; but the original dose of 15 minims is to be resumed again.

Fourth day, at 9.30 A.M.—Has passed the night without severe pain. Pulse 94. Temp. 99°. Abdomen still tumid. Is much disturbed by nausea, evidently aggravated by the morphia. It was therefore stopped. Ordered calomel gr. ij., bismuth sub-nitrate gr. v., to be repeated three times at intervals of three hours. At 7.30 P.M., has taken no morphia since 6 A.M. without increase of pain; nausea persists. Pulse 84. Temp. 98°. Ordered sinapism to epigastrium, ol. ricini ℥ss., and enema of infusion of catnip.

Fifth day.—Pulse 84. Temp. 98° morning and evening. Flatulence and nausea persist. Abdomen tumid. Cap. calomel gr. ij., sodæ bicarb. gr. v., every four hours.

Sixth day, at 9.30 A.M.—Continued flatulence and nausea, with eructations accompanied by severe colic pains. Pulse 102. Temp. 101°. Stopped calomel powder, of which he had taken six. At 7.30 P.M., no decided relief. Ordered ol. ricini ℥ss., and an enema of catnip, to be administered through an O'Beirne rectum tube, inserted high up.

Seventh day, at 9.30 A.M.—The severe colic pains continue. Pulse and temperature abated. At 8.30 P.M., Prof. Alonzo Clark joined us in consultation, and after a careful examination of the patient, confirmed the diagnosis already arrived at. By careful percussion he outlined a dull space upon the surface identical with the seat of local tenderness, but unaccompanied by any elevation on the surface corresponding to it. He also defined by palpation the outlines of a deep-seated tumor of somewhat firm consistence, the centre of which also corresponded to the tender spot on the surface. Patient's sufferings were further aggravated by the development of an inflamed swollen hemorrhoid, occupying the right half of the verge of the anus. It was split into two halves by transfixing it lengthwise at its base with a sharp-pointed bistoury, and cutting outward through the surface. An enema of 20 drops of Magendie's solution was then administered.

Eighth day, at 9.30 A.M.—Patient had passed a distressing night, chiefly caused by the hemorrhoid, but obtained some sleep toward morning after a hypodermic injection of morphia. Has had several free liquid evacuations, and has vomited two or three times; the abdomen has now become more supple. Pulse 98. Temp. 99° to 100°. At 7.30 Prof. T. M. Markoe joined our consultation, and also confirmed the diagnosis.

Ninth day, at 9.30 A.M.—Patient passed a better night, more free from pain. No vomiting, no eructations. Takes more liquid nourishment. Pulse 72. Temp. 98⅕°. At 7.30 P.M., pulse 68. Temp. 98°.

Tenth day.—A good night. Pulse, morning and evening, 61. Abdomen less tumid and more supple. Local tenderness on pressure is again becoming more marked; its centre of greatest intensity remains at the same point.

November 19th, eleventh day.—At 1.30 P.M., Prof. Clark met us again in consultation, with special reference to an operation. Patient's condition was as follows: The tumidity of the abdomen had subsided to such a degree, that the surface between the umbilicus and crest of the right ilium, from being elevated, had become sunken. The deep outlines of the tumor could be more easily distinguished by palpation, though there was still no circumscribed elevation upon the surface at the point where the greatest sensibility to pressure existed. No fluctuation was perceptible, nor was there any redness of the surface nor adhesion of the skin to the underlying parts. Instead of dulness, there was now resonance on percussion over the seat of greatest sensibility. This condition of resonance, conflicting as it did apparently with the supposed presence of suppuration, might depend, as afterward proved to be the case, on the co-existence of gas with pus in the cavity of the abscess. This apparently conflicting condition did not, however, deter from the proposed explorative operation, which was performed as follows:

Operation.—Before the inhalation of ether was commenced, the precise seat of greatest sensitiveness under digital pressure was once more determined and located, as it had uniformly been, by daily repeated previous examinations, midway on a line between the umbilicus and the ant.-sup. spin. process of the right ilium. After complete anæsthesia and relaxation were produced, the deep-seated outlines of the tumor were again confirmed by a more thorough palpation than had been admissible at previous examinations. At the point chosen upon the surface a puncture was made through the skin with a bistoury, to facilitate the onward progress of a sharp-pointed canula of the size of No. 1 bougie scale, which was advanced cautiously through the aponeurotic and muscular parietes of the abdomen to a depth of more than one inch, when pus escaped by the side of the canula, and immediately after through the canula itself. The canula being held *in situ*, served as a guide, upon the outer surface of which a sharp-pointed bistoury was conducted into the cavity of the abscess, and the opening enlarged. At the same time the

external wound was also enlarged by dividing the skin and underlying parts to the extent of nearly two inches. A dressing forceps was then introduced with closed blades, and withdrawn with the blades opened, so as to enlarge the entrance of the abscess. A free discharge of grayish fœtid pus, without stain of bile, to the amount of more than an ounce, followed, together with an abundant escape of gas. A finger was next inserted into the wound to enlarge still further the opening and explore the cavity of the abscess, which was found to extend in every direction laterally beyond the reach of the finger; its opposite wall, however, was reached by the end of the finger, but nothing definite was ascertained by it. A plug of cotton wick well greased was inserted, and left in the opening to maintain it free, and poultices were directed to be continued. In the evening patient was found comfortable, and his pulse at 84.

Second day after operation.—Had passed a good night, and taken food with some appetite. Removed the plug, and gave exit to a copious discharge of brownish matter, followed by thick laudable pus. Pulse, 82; temperature, 99⅘°. Replaced the plug, which was thereafter to be kept in only during the day and left out at night. On the third day poultices were discontinued, and a dressing of simple cerate substituted. The abscess was injected with salt and water, and the injection was to be repeated on the two following days. On the fourth day a particle of greenish fœcal matter of the size of a split pea was expelled with the injection. On the fifth, sixth, seventh, and eighth days small tufts of sloughy tissue, ascertained to be connective tissue by microscopic examination, were discharged, the suppuration continuing healthy and abundant. On the twelfth day suppuration no longer proceeded from the cavity of the abscess, but from the external wound alone, which was steadily filling up and contracting. Patient's general condition steadily improved, after the opening of the abscess, under the use of generous diet and the citrate of iron and quinine, gr. v., ter in die, as a tonic. On December 4th, the fifteenth day, he was able to be removed to the house of a friend in the vicinity of the Central Park.

December 17th.—The wound has healed, and patient has resumed his out-of-door life.

Remarks.—The conditions upon which a diagnosis was based in this case were the following: 1st. The abrupt onset of the attack without any premonition of its approach. 2d. The early development of acute local sensibility referred to the ileo-cœcal region, and restricted within a small circumscribed space, where the slightest degree of digital pressure could not be tolerated. 3d The uninterrupted persistence of the acute local sensitiveness within the same restricted limits, as was verified on each succeeding day, by carefully repeated exploration up to the day of the operation. 4th. The recognition of a deep-seated circumscribed tumor of rather firm consistence, indistinctly definable in the earlier stages of the disease, owing to the general tumidity of the abdomen, but becoming more clearly outlined as the tumidity subsided, and the abdominal parietes became more supple. The centre of the deep-seated tumor also corresponded to the focus of greatest sensibility on the surface. It was not, however, until the eleventh day after the attack that the deep outlines of the tumor could be defined with such a degree of distinctness as to determine the writer to resort to an operation for establishing an external opening in the abdominal walls, and the operation was then undertaken, notwithstanding the absence both of fluctuation and elevation of the surface over the tumor, and also notwithstanding the presence of resonance on percussion over the tumor, where previously there had been dulness, the resonance being attributable to the coexistence of gas with pus in the cavity of the abscess. It was a matter of regret in this case that a digital exploration per anum was rendered inadmissible by the presence of an inflamed and very sensitive hemorrhoid.

Symptoms.—In a retrospect of the progress of the symptoms in this case, it is interesting to observe that constitutional reaction was first noticed twenty-four hours after the attack, when the pulse had risen to 106 and the temperature to 101°. Twelve hours later, and after a second application of leeches had been made and the narcotic treatment put in operation, the pulse had fallen to 86, and the temperature to 100⅗°.

On the third day the pulse was 98, temp. 99°.

On the 4th and 5th days the pulse was 84, temp. 98°.

On the 6th day the pulse rose to 102, and the temperature to 101°. On this day the distressing colic pains, with eructations and nausea, reached their maximum of intensity, and the tumidity of the abdomen its greatest degree of development. On the 8th, 9th, and 10th days the pulse subsided to 78, 72, and 64, and the temperature to 99°, 98⅕°. On the day of the operation (the 11th of the disease), the pulse was 82, and the temperature 99⅕°.

The uniformly moderate rate of the pulse and temperature, notwithstanding the severity of the abdominal pains, indicating as it did the absence of inflammatory action affecting the peritoneum, afforded a sure ground for hope of a favorable prognosis.

Treatment.—Mr. Jas. Burne, in Vol. XX. of the *Transactions of the Med.-Chir. Society of London*, judiciously cautions against the energetic depleting treatment in the onset and early progress of the disease that might be applicable to acute idiopathic peritonitis. The object of the treatment should be to moderate the production of pus, and thereby diminish the strain upon the adhesions that wall in the abscess, and shut it off from the general peritoneal cavity, till the favorable moment arrives for giving it exit by an external opening through the abdominal walls. In the present case these views of treatment were carried into effect by two applications of leeches to the seat of disease; the first of twelve leeches at the expiration of twelve hours after the attack, the second application of six at the expiration of twenty-four hours, followed by poultices. The narcotic treatment was commenced twenty-four hours after the attack by the administration of morphia, and continued at regulated intervals for forty-eight hours, after which it was only occasionally repeated by hypodermic injection to allay severe pain. At no time was narcotism urged beyond a somnolent condition, from which patient could readily be aroused when spoken to. The administration of calomel was carried, perhaps, farther in this case than would be advisable in all cases. The distressing colic pains with eructations and nausea, together with indications of deranged hepatic functions, constituted a complication in his condition, which it was hoped might be corrected by mercurials. The fæcal evacuations, sometimes copious, which followed their use, certainly alleviated his sufferings, and were not accompanied by any injurious effects. The present case is the second, in which the writer has successfully established an external opening in the abdominal walls for the evacuation of an abscess, by a modified procedure differing in certain respects from the method originated and employed by Prof. Willard Parker in 1867, and repeated since by others.

IRIDOTOMY

BY

WECKER'S FORCEPS-SCISSORS.

By HENRY D. NOYES, M.D.,

NEW YORK.

An eye from which accident or operation has removed the crystalline lens and been the occasion of severe inflammation, furnishes a case whose treatment is often extremely embarrassing. After the symptoms of reaction have passed away the situation is as follows: The iris has become infiltrated with exudation which has been converted into connective tissue, and is in a state of latent hyperæmia; the pupil is shut by a neoplastic membrane, and is often dragged out of its place toward the wound which was the beginning of troubles; the lens capsule is thickened, and adheres to the posterior surface of the iris, and adds to the thickness of the pupillary obstruction; the ciliary body is hyperæmic and irritable. This picture, in variable shades of aggravation, portrays the problem which confronts the surgeon who desires to confer sight upon an eye whose deeper parts are sufficiently sound, and which only needs a suitable aperture to give entrance to light. Many methods have been devised to make the artificial pupil for this case. Every operation which causes traction at the periphery of the iris is sure to be unsuccessful, because the ciliary body is thus irritated. Some of the means which have been useful are Agnew's operation by a stop-needle and hook—an operation by two hooks pulling from the centre of the iris toward the margin, which I devised—removing a piece of iris at one sitting, and subsequently attacking the membrane which is uncovered—iridotomy by a broad needle or narrow knife, as recommended by Graefe. While success has been attained by all of these methods, failure has attended upon them all in some instances.

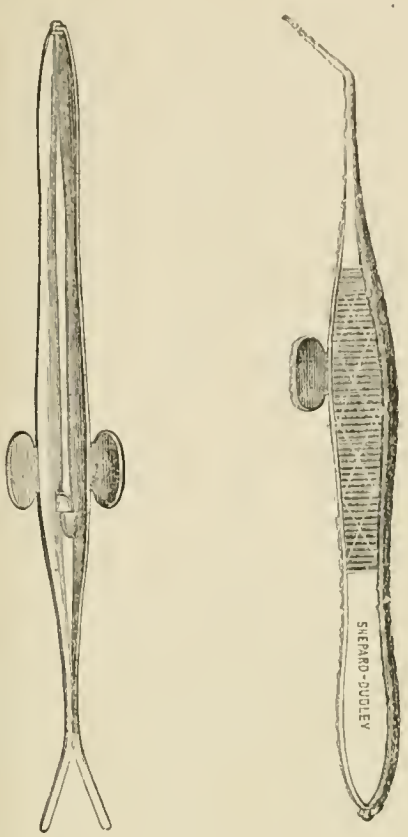
The failure comes in the form of renewed inflammation of iris and ciliary body, sometimes accompanied by hemorrhage into the anterior chamber, by which a fresh membrane is formed, and the opening established becomes again obliterated.

Dr. Wecker, of Paris, has published his results in performing an operation which has marvellously overcome the difficulties of this troublesome condition. His method is iridotomy by a scissors of peculiar construction. I have tested this proceeding in twenty cases, and feel constrained to let it be known how satisfactory I have found it to be. Up to within a week not one case had turned out badly, so far as the merits of the operation are concerned. This one bad case has just occurred, and will be properly related. It does not furnish any argument against the merits of the operation, but proves what mischief may come from an imperfect instrument.

Iridotomy, as its etymology imports, is merely cutting into the iris or obstructing membrane, without removing any portion of it. It is an entirely different proceeding from iridectomy, and manifestly can be resorted to only to divide adhesions of the iris to the cornea, or to secure an opening in the iris when the lens is wanting.

It may be done by a broad needle through the cornea, or per scleram behind the iris; but this simple form of the operation is successful only in the less severe cases. A bent and double-edged knife, which Graefe suggested, is convenient, but does not really modify this method.

The use of scissors is an old suggestion, but they have not found favor. The Wecker scissors are constructed more after the fashion of sheep-shears than of the usual instrument, and are represented in the diagrams.



Their general form is like the iris-forceps introduced by Liebreich some years ago. It requires skilful workmanship to make them properly. The blades must, of course, be delicate and sharp, but they must be so set that the edges rub firmly against each other from heel to point without missing exact contact for a tenth of a millimetre. They always creak as they are closed, and will cut the finest fibres of loose floss silk without failure. With such an instrument, *and no other is fit to be used*, Wecker's operation is a surgical triumph.

He uses a narrow and thin-edged lance-knife to make a wound at the margin of the cornea, about five millimetres long. He has had knives made with a stop, so that the wound shall always be of the right length. It is not essential to employ them, but the knife must be thin and keen. When it has made a wound of the proper length, it is partially withdrawn, and as aqueous humor escapes, and the iris approaches the cornea, is again pushed forwards to make an opening into the iris. Then it is quickly pulled out, and the scissors are taken in hand. They work equally well with both the left and right hand of the operator. They are passed into the anterior chamber with shut blades, and then allowed to open so that one blade shall go behind, and another in front of the iris. Some tact is needful to give easy play to the blades, but however they may be held, they cut whatever tissue lies between them with great certainty. It is advisable in almost every case to make two cuts at an

acute angle with each other, like the letter V. The second cut is the more difficult. The opening thus made is of irregular outline, sometimes like an arrowhead, sometimes like the shape of a bicuspid tooth, the roots being often of unequal length. If only one cut be made the tissues may not retract sufficiently, but with two cuts an ample pupil may be secured.

It is not uncommon to have a small loss of vitreous humor: from this occurrence I have never seen ill results. Hemorrhage of any importance I have not experienced. Recovery from the operation has been prompt, and never attended by serious reaction, with one exception. Usually less than a week suffices to dismiss the case. This circumstance constitutes one of the special recommendations of the proceeding, and this will appear more distinctly by reference to cases. In only one case have I failed to secure a satisfactory opening through both iris and capsule. This will be duly narrated and explained.

I began to perform this operation in March, 1874, and my last case was done November 19, 1875—in all twenty cases.

The cases on which I have operated have been of two classes: 1st, occlusion of pupil, with attachment of the iris to thickened capsule and absence of lens; 2d, adhesion of iris to the cornea.

Of the first series I will cite the following illustrations:

Case 1.—Mrs. J. H., æt. 78. Had had cataract removed from both eyes, without any improvement of sight. Severe inflammation had occurred, by which one eye had atrophied, and the other had imperfect perception of light. In the latter the lower two-thirds of the cornea was opaque, and what of the iris appeared through the upper third was atrophied; the globe a little soft. This unfortunate condition of both eyes was due to the previous poverty and the unmanageable disposition of the patient. She was, in fact, insane. The operation done on March 11, 1874. A good pupillary opening obtained, and the eye recovered very promptly. No improvement was obtained in vision, because of the unhealthy state of the interior of the eye. The case was operated upon to test the feasibility of the operation, and was in this respect encouraging.

Case 2.—Mrs. B., æt. 56. Was operated on for cataract by Graefe's method in 1872, and obtained vision $\frac{2}{70}$ in both eyes, with the ability to read Snellen II. at twelve inches. In June, 1874, the pupil of right eye was found drawn high up to the cicatrix and obscured by a dense membrane, permitting only perception of light. The left pupil was covered by a thinner membrane, and vision was $\frac{1}{100}$. Upon the right eye iridotomy, with a single cut by the scissors, gave an opening which, at the time, seemed abundantly large. But the next day the edges of the pupil had approximated to such a degree as to give a less satisfactory result than was hoped for.

In a week patient was discharged, able, with this eye, to count fingers at six feet. In the left eye keratonyxis restored vision to $\frac{2}{70}$.

Case 3.—Mrs. C. J. Extraction of cataract by Graefe's method, in October, 1874, followed by suppurative iritis and closure of pupil. In February, 1875, a double iridotomy done; reaction very moderate; a clear pupil of sufficient size obtained. A small tag of iris occasioned some inconvenience by its swinging motion. With + 4, vision = $\frac{2}{100}$. The vitreous was found to be hazy.

Case 4.—Mrs. E. S., æt. 83, had an extraction of cataract by Graefe's method, in May, 1874. Exudative iritis followed, and it was two months before patient was discharged, and her health, which at best was very feeble, was much reduced by diarrhœa. In about five months she was seen again, and found to have vision of $\frac{1}{6}^{2}$ with + 3. The pupil drawn upwards, and covered by a thin membrane. In five months longer the membrane had thickened, and vision greatly reduced, so that she could not read any common type. The membrane was attacked by two needles, but no sufficient aperture could be made. Five days after the keratonyxis, double iridotomy made, and a large pupil obtained. Vision $\frac{1}{100}$; the vitreous found to be filled with opacities. Extreme age and infirmity made this case most unpromising, and the measure of success which was achieved was due to her indomitable pluck as well as to the suitableness of the operation.

Case 5.—Mrs. E. S., æt. 76. Graefe's extraction, Dec., 1874, followed by a slow iritis; discharged after a month, with vision $\frac{2}{100}$, with + 4. In April, 1875, the pupil was dragged upwards, and occupied by a membrane.

By a double iridotomy, under which the membrane gave way readily, a clear, large pupil was obtained. No reaction ensued; patient discharged in five days, with vision $\frac{2}{70}$ with + 4, and able to read Snellen IV.

Case 6.—Mrs. N., æt. 45. Extraction of cataract by Graefe's method, in Feb., 1874, followed by exsudative iritis and occlusion of pupil. Patient only able to count fingers at three feet. A year afterwards I made a double iridotomy, whose result was a pupil of the size and shape shown in the diagram and which may serve as an illustration of the form of pupil commonly made. With + 3½ vision = $\frac{2}{40}$.

Case 7.—Boy, æt. 9, had his left eye injured by a piece of iron, which passed through cornea and iris, and caused cataract. The lens was absorbed, and the sight was obstructed by a thick capsule and the partial closure of the pupil. The iris was adherent to the outer part of the cornea, where the foreign body entered, but not adherent to the capsule. By double iridotomy the iris and capsule freely divided. The result was that the opening in the iris was enlarged, but the cuts in the capsule reunited, and left an obstructing membrane as intact as before.

The lesson from this case is, that mere division of a capsule not adherent to the iris will not secure an opening. The method must be one of dilaceration, or of extraction. I have very many times extracted such capsules by a small, sharp hook, which is an operation of some delicacy. I have in one case had a perfectly satisfactory result by attacking the membrane from behind with a long straight needle passed through the sclera, as was formerly done in reclination of hard cataract. The membrane was torn, and so far displaced into the vitreous as to leave the pupil free and vision good. I am of the opinion that this proceeding may be well and safely adopted in certain cases.

Since the above was written, another case has fallen to my experience which it is needful to narrate. It is the only one in which a disastrous result has occurred, and points out strongly the dangerous element in cases of secondary cataract.

Case 8.—Mrs. W., æt. 65, has had extraction of cataract in both eyes. The healing process was slow, and iritis occurred, followed by some thickening of capsule. In one eye a needle-operation secured a good opening and perfectly satisfactory sight. In the other eye reading was impossible, although it could count fingers at several feet distance. At my advice

the patient submitted to iridotomy. It should be remarked that the iris was caught in the cicatrix and presented a small black prominence. As soon as the eye was touched with fixation forceps, a decided injection appeared, showing that the ciliary body and iris were in a condition of chronic hyperæmia and irritation. This would have been accepted as a contraindication to any other mode of operating, but by the method intended a valuable degree of relief was to be expected, because the adhesion and dragging upon the ciliary region would be loosened. The incision in the cornea was made with some difficulty, because the knife proved dull. The first cut in the iris was easily made, and gaped widely. In making the second cut the scissors failed to sever the relaxed membrane completely; a small tag of tissue remained, and in trying to divide it a little pull was made upon the opposite periphery, which caused hemorrhage from the region of the ligamentum pectinatum. After completing the operation the scissors were examined and a spot was found near the end of the blades where they did not forcibly press upon each other and creak when the edges passed. This defect accounted for the imperfect work of the instrument, and occasioned the traction on the iris.

During the following night severe pain occurred, suppurative irido-keratitis was set up; the pupil choked with yellow exudation, and the cornea hazy. The severe pain was much relieved, and the symptoms abated by an incision about 6 mm. long across the lower border of the cornea with a Graefe's knife. Hot fomentations were freely used, and the inflammation passed its climax in about four days. The result was, to leave the eye in a condition worse than it was before the operation.

The lesson to be taught by this case bears most upon the precision with which the operation should be done, and the perfection of the instrument. The same amount of ciliary irritability was present in other eyes as in this case, and no evil effects succeeded the operation.

It would be tedious to adduce any more cases of this description. I may remark that all the operations except the last have been done with the aid of ether. Loss of vitreous has occurred in several cases, but this has never had a bad effect on the result so far as I could judge. In one man the vitreous was almost wholly fluid, and about one-half of it flowed out of the globe during the manipulation. The eyeball collapsed to a degree which much embarrassed the operation, but good success ensued.

In conclusion, I will relate some cases where this operation has been used for separating adhesions of the iris to the cornea.

Where the adhesion is small and the iris healthy, iridectomy best fulfils the indication and gives the best pupil. For the worst cases, in which the iris is atrophied and largely engaged in the corneal tissue, iridotomy has served admirably. One case in illustration will suffice.

Case 9.—James McK., æt. 34. In childhood had severe kerato-iritis of both eyes. The right cornea was perforated and the whole pupillary circle prolapsed. The lower half of the cornea became densely opaque, the upper half clear; the iris atrophied and tense.

In the other eye cataract occurred, and it became very desirable to render the sight available. The patient had been under my care in 1863, and I had operated on both eyes by iridotomy. Marked benefit was gained in the left, but none in the right.

Upon this latter I did iridotomy in July, 1875. A full, free pupil was obtained, no unpleasant reaction followed; the patient able in a week to go home. The degree of vision recovered was small, because the vitreous proved to be hazy. But the patient could go about alone, and placed his dependence on this eye.

There is no special difficulty in doing the operation upon these cases. One may, however, be disappointed in the size of the opening after the section. Sometimes the iris does not retract at all, although severed from the cornea, and it will retract only in cases where its fibres are upon the stretch. If the iridotomy do not give a proper aperture, it prepares the way for a successful iridectomy at a subsequent period.

The merits of Wecker's operation are favorably remarked upon by Prof. Becker in the last fasciculus of Graefe and Saemisch B. v. Erstehälfte. 3, 428; and Mooren (Ophthalmologische Mittheilungen aus 1873, Berlin, 1874, p. 80) reports having done 22 operations, in all of which, except two, satisfactory results ensued. The two exceptional cases were not failures of the operative proceeding, but failures to restore sight—in one because of choroidal disease, in the other because of an accidental inflammation, which subsequently occluded the pupil.

FRACTURE OF THE INTERNAL MALLEOLUS, WITH DISLOCATION OF ANKLE-JOINT.

By PHILIP A. BISSELL, M.D.,

MAHANOY CITY, SCHUYLKILL CO., PA.

The forepart of September last I was called to see Elijah Brayford, and found that he had dislocation of the left ankle-joint, the tibia resting upon the centre of the foot. I attempted the reduction, and made it *à la* Hamilton (page 710), and to my surprise it immediately returned to the same condition in which I found it, as soon as I loosed the foot. I immediately reduced again, thinking that the first time I had not succeeded, when the same thing took place again. Upon a careful examination I found a fracture of the projection of the internal malleolus, and as I attempted reduction the end of the bone had turned directly between the tibia and astragalus, forming a wedge, throwing the bone out of place as often as I would forcibly put it there. By careful manipulation I succeeded in dislodging the fractured end, and effected the reduction, the leg maintaining its position on the foot; also returning to place the fractured end of the malleolus. In six weeks he was able to walk with staff, and an examination to-day, Nov. 24th, about ten weeks after the accident, shows no deformity of the limb. Was not the case of Earle, as cited by Hamilton, which he lost by amputation, the same or similar? It occurred to me as being parallel, and only presenting this feature, which induced me to report it for publication.

The Imperial Board of Health in Germany.—A sum amounting to about $4,000 has been appropriated to the establishment of a Supreme Board of Health for the German empire, the principal object of which will be to collect reliable statistics in sanitary matters, although it is reported that the board is also to be a sort of sanitary court of appeals, to which the district administrative boards or provincial governments will have to refer for sanitary advice and decision. It is also reported that Dr. Strack, Prince Bismark's private physician, will be the president of the board.

Progress of Medical Science.

Mammary Papillæ as Signs of Pregnancy.—Dr. Vedeler has collected some interesting statistics on this point, having examined the breasts of women at various periods of their life. The breasts of 20 females, between the ages of 11 and 16, were first examined. In 12, whose breasts were not developed, he found no traces of papillæ. In 6, whose breasts had commenced to develop, he found slight papillary elevations. In 2, who had moderately well developed breasts, there were from 3 to 8 papillæ, each the size of a pin's head. Surprised by these phenomena, and thinking they might have been the result of some irritation by which the activity of the breast had been aroused, he examined 60 women who had never been pregnant. Of these 55 were unmarried, and of them 44 had papillæ and 7 had none; while in 3 they were from 1 to 1¼ lines high, or as large as in pregnant women. One of them, a woman 53 years of age, who had long ceased to menstruate, had moderately large papillæ.

Of 4 married women, between 22 and 24 years of age, who had never been pregnant, all had papillæ. One married woman, 53 years of age, who had ceased to menstruate, had no papillæ, but the breasts were atrophied. Thus in only 13 per cent. of these 60 cases were papillæ absent.

Of 334 pregnant women, papillæ were absent in 26 cases, or in about 8 per cent. Of 56 women who had borne children, but were no longer pregnant, the results of examination were as follows:

In all but 3 of 15 primiparæ, who had children under one year of age, the papillary bodies were present, and of varying size.

Of 27 primiparæ and multiparæ, who were still menstruating, and whose youngest children were from 1 to 20 years of age, but 4 were without papillæ, and in two of them the breasts were atrophied.

Of the remaining 14, who had ceased to menstruate, and were between 50 and 70 years of age, their youngest children being from 15 to 35, 11 had papillæ and 3 had none.

Dr. Vedeler accordingly believes that the papillæ of themselves have no value as a sign of pregnancy, since they are found in the menstruating and non-menstruating girl, as well as in the married (sterile, or fecund) woman, or even in decrepid age. They may, he believes, be of diagnostic value, where previously existing papillæ become hypertrophied, or where new ones appear. They may disappear entirely, but under what circumstances is not clear.—*Norsk. Mag. f. Læg.*, 9, 1875.

Uterine Asthma.—Dr. J. Waring-Curran thinks that the treatment of this disorder should be wholly directed towards the uterus. If the asthma precede the catamenia, the latter must be encouraged by a warm bath, while small doses of ergot are to be administered internally. Should the discharge be excessive, it must be controlled but not stopped by the same drug.

The remedy, however, which will relieve the asthma at any stage, is belladonna, applied locally and given freely internally. The extract is the most reliable for external use, and the tincture for internal, and they should be combined with full doses of the bromide of potassium. In the intervals he prescribes iron and strychnine, and applies iodine locally.

He also recommends that the extract of belladonna, spread on a piece of lint, be applied along the lower dorsal and lumbar vertebræ.—*The Practitioner*, Dec., 1875.

Varicella Prurigo.—Dr. Jonathan Hutchinson states that it is probable these cases do commence in children as *bonâ-fide* varicella. Their peculiarity consists in that the eruption, instead of disappearing in a few days, is prolonged indefinitely, by a succession of fresh crops, and that the spots ulcerate and scab, sometimes becoming large sores. He does not think that after the first stage any vesicles appear that are likely to be mistaken for those of varicella. On parts where the skin is thin, these vesicles are like those of pemphigus, becoming turbid very quickly, and are soon broken by the patient's scratching. On the palms of the hands and the soles of the feet perfectly transparent vesicles are not uncommonly found, which last for a few days. The eruption is attended with intense itching. He observes that all the cases he has met with were sporadic. He has never seen persistent vesicular rash following varicella as an epidemic malady.—*British Medical Journal*, November 20th, 1875.

Extirpation of the Uterus by Abdominal Section.—Dr. James R. Chadwick describes the removal of a fibroid tumor of the uterus, extending two inches above the navel and resting below upon the brim of the pelvis. The patient being under the influence of ether, the following operation was performed:

An incision eight inches long was made in the median line, and the enlarged uterus, which was entirely free from adhesions, was lifted out from the abdominal cavity. A Wells' clamp was then affixed to the cervix and broad ligaments, and in addition a double whip-cord ligature was passed through the cervix so as to include the broad ligaments. The body of the uterus containing the fibroid was then cut away, the wound closed with silk sutures, and the usual support of cotton-wool applied. The patient passed through the usual stages towards a recovery, till midnight of the seventh day, when tetanus set in. She lingered, with slight benefit from chloral enemata, and died near the end of the eighth day. The perfect success of the operation *per se* was indicated by the condition found at the autopsy. He is decidedly of the opinion of Péan, who after operating in 20 cases with 15 recoveries, asserts that the danger is no greater than in ovariotomy.—*Boston Medical and Surgical Journal*, November 4, 1875.

Strapping the Breasts to Prevent and Arrest Lactation.—Dr. W. W. Munson has adopted this plan successfully in a large number of cases. He usually commences by placing a strap laterally beneath the breast, half way between the nipple and the lower margin, so as to draw the gland well up, attaching one end of the plaster high up on the sternum and the other end high up under the arm. The next strap is placed at right angles to the first, close to the nipple. Holes are to be cut through the straps that pass over the nipple, letting it project through, thus allowing the milk, which may ooze out, to escape.—*New York Medical Journal*, November, 1875.

The Kansas City Medical Journal has ceased to be published.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, January 15, 1876.

STATE MEDICINE IN ITS RELATIONS TO INSANITY.

ONE of the most interesting and valuable papers presented at the meeting of the American Social Science Association, held at Detroit last May, was that bearing the above title, presented by Dr. Nathan Allen, State Commissioner of Lunacy for Massachusetts, the able writer on insanity and kindred topics. After the compliment this paper has received by its publication in full in the English *Journal of Psychological Medicine and Mental Pathology*, of Oct. 1st, 1875, edited by Forbes Winslow, M.D., with highly commendatory remarks by Dr. Winslow, it needs no further remarks respecting its high scientific value. There are a few points of interest in it, however, which we desire to notice. After giving a full account of what is being done in the different New England States, for the insane, Dr. Allen speaks of the apparent increase of insanity in these States, which he attributes in part to the undue development of brain and a morbid state of the nervous system. He then speaks of the chronic insane, advocating the separation of the acute and chronic cases. The subject of the committal of the insane is ably handled; Dr. Allen's opinion being that improved legislation is needed in most of the New England States, which would throw greater safeguards around the committal of all persons who are charged with insanity. He also very properly speaks of the great importance of a commission of lunacy in each State, and thinks that there should be a more thorough investigation into the etiology of insanity. We agree with him here most heartily, as this subject is altogether too much neglected. The more we know of the causes of insanity, the better able we shall be to strike at the root of the disease, so as to prevent and check it. Dr. Allen very truly says that the public need to understand more clearly the *causes* of insanity, and also to appreciate the fact that these causes are subject in a great measure to the control of human agency. Speaking of legislation in this direction, Dr. Allen remarks: "Nowhere in the whole domain of legislation do we want greater intelligence and liberality, or sounder wisdom and a higher tone of morality than in making the best possible provisions for the insane. There should be combined with such legislation a thorough knowledge of sanitary and hygienic agencies in their application not only to public institutions, but to the community at large, so that the means of *prevention* as well as cure may be wisely employed. And until such legislation takes place no legislators can be said to have discharged their whole duty to their constituents or to the public." Dr. Allen quotes in this connection from the last report of the Commissioners of Lunacy for Scotland, which it will be seen bears directly upon this topic: "It is impossible to come to any other opinion than that insanity is, to a large extent, a preventable malady; and it appears to us that it is in the direction of preventing its occurrence, and not through the creation of institutions for its treatment, that any sensible diminution can be effected in its amount. Lunacy is always attended with some bodily defect or disorder, of which it may be regarded as one of the expressions or symptoms. We must, therefore, attempt to prevent its occurrence in the same way as we attempt to prevent the occurrence of what are called ordinary bodily diseases; and if it be admitted that, to a large extent, preventable diseases exist among us in consequence of the ignorance of the people, it is clear that we can only convert the preventable into prevented by the removal of that ignorance through a sounder education." This idea that insanity is to be prevented by the better education of the ignorant masses, so that they may become proper guardians of their own physical, intellectual, and moral health, is a very sound one, and worthy of the earnest attention and study of all those interested in the prevention and cure of insanity. The subject of the improved treatment of the insane is referred to, and in this connection Dr. Allen introduces two letters, one from Dr. H. B. Wilbur, of the New York Asylum for Idiots at Syracuse, and the other from Dr. Charles F. Folsom, secretary of the Mass. Board of Health and Medical Superintendent of the McLean Asylum at Somerville, Mass., on the improved treatment of the insane in foreign asylums. Both of these gentlemen, with excellent facilities for judging, unite in their testimony of the great amount of good which is being accomplished by the introduction of more liberty and freedom, and more employment, in the asylums of England and Scotland. These asylums have very wisely introduced industrial occupations to a far greater extent than we have as yet in our American institutions, and with the best results. The writer has always held that industrial pursuits of a light nature are an effective and valuable remedy in the treatment and restoration of the insane, and in urging

the adoption of such measures by the State Board of Charities, at the meeting of the American Social Science Association in Detroit last May, gave it, as his opinion, that the system of false economy which refuses to make the necessary outlay for fitting up workshops and engaging the necessary extra attendants for them, results oftentimes (especially in the winter, when out-of-door work is impossible), in the enforced idleness which is too often fatal to recovery.

In Dr. Wilbur's letter mention is made of his visit to the Fife and Kinross District Lunatic Asylum in Scotland, the medical superintendent of which is the able Dr. John Fraser. Dr. Arthur Mitchell, Commissioner in Lunacy for Scotland, had just made a visit to this asylum, and Dr. Wilbur copied a portion of his record upon their register. It shows very forcibly to what an extent the idea of freedom is carried out in this institution. It is as follows: "In visiting the male side of the asylum every door was found unlocked. On the female side, only three doors required to be opened by a key. Of the 245 patients in the asylum, 220 occupied unlocked rooms. This fact involves more than the mere removal or abatement of the sense of imprisonment. It has this desirable result in all the inmates; but to a very large and increasing number it means actual freedom to come and go at pleasure. It is admittedly of importance to avoid the mere appearance of restraint, but much more than this is done here—the freedom accorded to the patients being real as well as seeming. On the male side, in so far as locked doors are concerned, no difference was seen between the arrangements of this asylum and those of an hospital for the treatment of ordinary diseases. It is satisfactory to be able to add, that the effects in the management are to render it easier and cheaper." Dr. Folsom refers in his letter, already spoken of, to his visit to the West Riding Lunatic Asylum, in England, where, of the fourteen hundred patients, not one was undergoing mechanical restraint in any form, and not one was in seclusion. Unlocked doors, a great amount of general freedom and occupation, and a large number on parole, he speaks of as being the prevailing and noticeable features of both this and Dr. Fraser's Scotch asylum.

This bold advancement in the treatment of insanity, originating in the Scotch asylum, with Dr. Batty Tuke, the former superintendent, based on the principle that insane patients will appreciate and justify the trust that is reposed in them, has proved eminently successful in England and Scotland, and we hope the day is not far distant when we may successfully emulate them.

It is but due to our own institutions to state, that owing to the management of our American asylums, the medical superintendent is generally unable to employ as many attendants as would be requisite for the successful establishment of such a mode of treatment in our asylums, owing to a false system of economy respecting the care of the insane, adopted by many boards of charities in the United States. To do this successfully, we should require not less than one attendant for every eight patients, and *well-trained* attendants also. This would double the number now employed in most of our public institutions. There is one point, however, where we think the English and Scotch asylums might copy us with advantage, and their costly hospitals would thereby become much more useful curative institutions than they are at present. We refer to our comparatively recent experiments in New York, Rhode Island, and Massachusetts, of asylums for the chronic and incurable insane, which are regarded by the highest authorities as valuable auxiliaries to our present mode of treatment, as they ease our hospitals of the dead weight of chronic insanity which fill our halls and impede us in our efforts toward the cure of recent and acute cases.

It has been stated by competent authority that fully ninety per cent. of the inmates of these fine European asylums are chronic, incurable cases, on whom all this expenditure for elaborate organization and classification is thrown away.

What such patients want is, a good *asylum* and *home*, not a *hospital*, which latter they only cumber up, to the great detriment of the recent, curable cases.

In Great Britain, the chronic insane have been sent to their friends or drafted to workhouses, both of which methods of disposing of them are obviously improper, as this class need competent medical supervision no less than recent insanity. The Twenty-Ninth Annual Report of the Commissioners in Lunacy for England and Wales shows that there are 10,000 lunatics in workhouses, and in their report they notice and acknowledge the fact that the hospitals for the insane are becoming filled up more and more with incurables. We do not intend these remarks as a criticism on Dr. Allen's paper, but merely to draw attention to the fact, that while there are many improved methods of treatment in foreign asylums which we should doubtless do well to imitate, yet we are much in advance of them in this respect at least, which we shall do wisely, we think, in following up, by erecting in every State an asylum for the chronic insane. Without saying more upon this subject, we would in closing congratulate Dr. Allen for his very valuable contribution to the literature of insanity, which he has made in his paper on "State Medicine in its Relations to Insanity."

MEDICAL STAFF RANK.

THERE is no doubt that an attempt will be made in the House to reduce the army about one third. While it seems probable that this attempt will not succeed, it may serve as an excuse for delaying action upon the legislation asked in behalf of the medical department.

It will be remembered that during the last Congress

petitions from almost every Medical Society in the United States were forwarded to that body requesting the passage of a bill, recommended by the American Medical Association, to make the position of the medical officers equal to that of the other staff corps. The House Committee on Military Affairs agreed without a dissenting voice to report this bill to the House, and one of its members was charged with this duty. This gentleman, although professing the greatest good will towards the medical department, and to this bill, never reported it, although he found opportunity to report and to get passed several bills for the benefit of other staff corps. By this ingenious specimen of what is known among politicians as "management," he prevented the bill from coming before the House at all. The American Medical Association at its last meeting appointed a new committee to bring the matter again before Congress. It is understood that this committee have decided to present it first to the Senate, which contains more of its previous members than the House, and is therefore more familiar with the subject. The chairman of the Military Committee of the Senate, General Logan, has promised, as we understand, to prepare and introduce a bill which will at least give some relief.

Precisely what form this bill will take has not been decided, but it is supposed that it may give to the medical department six colonels and twelve lieutenant-colonels.

HOMŒOPATHY IN MICHIGAN UNIVERSITY.

It will be remembered that in a recent number we made this remark:

"In answer to an inquiry by some of the students of the Medical Department of the Michigan University, Prof. Palmer is reported to have said in substance: 'With Dr. Sager it was a question of only two hundred dollars, while with us (the Faculty) it was a question of eighteen hundred dollars.' If there is any real foundation for this assertion it would appear that the matter of principle is not the only one which has actuated the said faculty in the stand which they have taken. We sincerely hope that some reasonable excuse can be offered for lowering the dignity of the position assumed to the meanness of a pecuniary consideration."

In a subsequent number it will be recollected that Prof. Palmer emphatically denied the charge. Since then we have communicated with our informant, and find that he had no foundation whatever for the statement he made to us. We always strive to obtain our information on good authority, but in the present instance we have been in error, and willingly acknowledge the fact. If our readers were acquainted with all the circumstances connected with this information, as we now are, they would not think it strange that we had been misled. However, we were careful enough to say at the outset that the statement was founded on a rumor.

RELATIONS OF PHYSICIANS AND DRUGGISTS.

In another column will be found a communication from a gentleman who speaks in defence of the objectionable practices of druggists. The arguments which he offers are quite original, if not convincing. The plea for "counter prescribing" is perhaps the most absurd of any that has been thus far advanced. No one, it is true, has a right to prevent any free-born citizen from chosing his prescriber, provided the object of his choice be competent. But if, despite the pretension, the latter qualification is not possessed, who shall take the responsibility of an occasional blunder? We must, however, for the sake of the argument, allow the latter to be impossible.

MEDICAL STUDENTS' RECEPTION.

The Young Men's Christian Association gave a reception to the medical students of the different medical colleges on Tuesday evening last. We are happy to say that the affair was in every way a success, and the guests fully appreciated the efforts made for their entertainment. The addresses delivered by Professors Fordyce Barker, T. Gaillard Thomas, and D. B. St. John Roosa were exceedingly appropriate and were well received. Altogether the students were made to feel their welcome, and no doubt carried away the impression that a sympathetic interest existed, not only towards them, but to the profession of which they are the prospective members. These gatherings do good in many ways, and should be encouraged by all interested in the rising generation of medical men. The Association, and particularly the committee who had the matter in charge, deserve the thanks of all for a very enjoyable and profitable evening to their guests.

Patients' Notions of the Clinical Thermometer.—A recent number of the *Student's Journal* gives some amusing examples of the "hazy" notions that illiterate patients in a London hospital had of the nature and uses of the clinical thermometer. A young woman who was convalescent, and whose temperature had long remained normal, had a slight relapse, which she attributed to having had "no glass under her arm for a week." A man suffering from acute rheumatism obstinately refused to have his temperature taken any more, saying "it took too much out of him. It was a drawing all his strength away." A man had been in the habit for some time of having his temperature taken daily under his tongue, with a thermometer that had just been doing severe duty in the axillæ of other patients. One night a brand-new thermometer was applied to his mouth, next day he declared he was not so well, and said "the glass was not so strong as usual; he felt at the time the taste was different, and it had not done him so much good!" A Sister in one of the women's wards says that many of the patients think the thermometers are used to detect breaches of the rule against having unauthorized edibles brought in by friends; and she accordingly does not disabuse their minds of their innocent superstition.

Reviews and Notices of Books.

THE POPULAR HEALTH ALMANAC FOR 1876. Edited by Frederick Hoffman. New York: E. Steiger, 22 and 24 Frankfort St. 8vo, pp. 44 (pamphlet).

THIS very useful and instructive annual is published with the ostensible purpose of replacing the various almanacs which are so plentifully distributed to the public by the nostrum venders. It is hoped that this means to counteract, in a measure, the schemes of the countless numbers of patent-medicine humbugs, who use an almanac for the purpose of advertising their dangerous wares. We doubt not that so far the almanac before us will fulfil the design of its editor, and be at once creditable to the giver, while at the same time it is instructive to the public. Its modest aim is to furnish useful information on matters of health, advice in emergencies, and the exposure of fraud connected with the patent-medicine trade, at the same time preserving all the features of a first-class almanac. In all these particulars it is so much a model of its sort that it meets with our unqualified approval.

A TEXT BOOK ON HUMAN PHYSIOLOGY, designed for the use of Practitioners and Students of Medicine. By AUSTIN FLINT, Jr., M.D., Professor of Physiology and Physiological Anatomy, Bellevue Hospital Medical College, etc. New York: D. Appleton & Co. 1876. 8vo, pp. 947.

THIS work is principally an abridged compilation of the five volumes of the author, for the sake of adapting the same to the uses of the student. Even with the greatest care in the condensation, the volume is of a ponderous, almost of an unwieldy size. Several new illustrations have been added with the view of lightening the labors of the students, although very little of entirely new material is presented. The chapter on the blood has been entirely rewritten, and there is an account of the depressor nerve which is not found in the larger volumes. As a work for students it will doubtless be of value, although a much smaller one would, for obvious reasons, be more acceptable. To the general practitioner, who cares to master the subject more in detail, the work will be especially useful.

ILLUSTRATIONS OF CLINICAL SURGERY (Fasciculus I.). By JONATHAN HUTCHINSON, F.R.C.S., Senior Surgeon to the London Hospital, etc. Philadelphia: Lindsay & Blackston.

ATLAS OF SKIN DISEASES (Part I.). By TILBURY FOX, M.D., F.R.C.P., Physician to the Department for Skin Diseases, in University College Hospital. Philadelphia: Lindsay & Blakiston.

THE illustrations by Hutchinson are to consist of plates, photographs, woodcuts, diagrams, etc., reproduced from a large collection, formed by the author during his professional life. The first fasciculus embraces four folio plates, including one colored and two plain lithographs of *encephalocele*, one plain lithograph of *ivory exostosis of the orbit*, three life-size chromos of *rodent ulcer*, and three chromos illustrating *chancre*. In addition there are a number of woodcuts. The artistic execution is all that is to be desired, and there can be no doubt that they will prove of service in facilitating the recognition of some of the rarer forms of external disease. Of their value in this connection the author relates, that upon one occasion he was called upon to examine a frontal tumor, into which a surgeon was about to introduce needles, in the belief that it was a vascular nævus. The fact that our author had previously seen a photograph of a case of encephalocele, enabled him to recognize the true nature of the growth, and to prevent an operation which would doubtless have proved fatal.

The value of well-executed illustrations as "royal roads to learning" cannot be estimated too highly. The publishers intend to issue additional fasciculi at intervals of three months.

FOX'S atlas purports to be a reproduction of Willan & Bateman's "delineations," to which will be added a number of new subjects. The first part contains four colored plates, illustrating five varieties of erythema, and two of urticaria. Comparing them with the edition of Bateman (1817) we find that the artist has taken little more than the idea of the original, which he has elaborated into much more truthful and life-like representations of the diseases portrayed.

While these plates are not equal to the magnificent cutaneous portraits by the late Dr. Elfinger, they will, doubtless, in consequence of their lower cost, obtain a wider circulation, and prove of great value to those who have not extensive clinical opportunities for studying this class of diseases. Additional parts will be published monthly.

Correspondence.

THE BLOOD-CORPUSCLES IN SYPHILIS.

TO THE EDITOR OF THE MEDICAL RECORD.

DEAR SIR:—In the report of my remarks on Dr. Keyes's interesting paper in your issue of January 8th, I am made to say that it is the accumulation of white blood-cells which constitutes one of the manifestations of syphilis.

What I did say was, that the accumulation of *vitiated*—that is to say *imperfect* cells (which could not be distinguished under the microscope from the normal white blood-corpuscles) constituted the material of *every* known manifestation of syphilis. That chancrous indurations, syphilitic gland enlargements, syphilitic papules and tubercles, gummy tumors, etc., were all made up of these *vitiated* white blood-corpuscles; and that the evidence of their vitiation or imperfection was in the fact that such accumulated corpuscles were never able in any instance to enter into the composition of any useful tissue, but were only present as an obstruction to the healthy action of the vessels and tissues with which they were in contact—*and hence* the elimination of this *imperfect* material, was the direct object of treatment; that mercury, which was known to be an active agent in bringing about the fatty degeneration of *healthy* tissues, might be readily accepted as capable of effecting the same result more easily and promptly in the case of the imperfect material; that chemical experience had shown *this* to be the fact, inasmuch as the moderate and prolonged use of mercurials has been found to be more efficacious in the cure of syphilis, and less harmful to the general system of the patient than where it was pushed to salivation, as was formerly considered essential, *and hence* we were led intelligently to the treatment of syphilis by a mild and prolonged mercurial course, rather than to the adoption of the

empirical method of administering the drug as an *antidote* to syphilis. The inference was then drawn that all forms of treatment which favored fatty degeneration and elimination might be expected to be useful in the treatment of this disease, and that the facts stated by Dr. Keyes were important as furnishing an additional aid in ascertaining the effects of treatment.

Very truly yours,

F. N. Otis.

108 W. 24th Street.

THE TREATMENT OF TYPHOID FEVER.

A LETTER FROM THE LATE SURGEON GENERAL TO THE EGYPTIAN ARMY.

To the Editor of The Medical Record.

Sir:—I have read with great interest Professor W. H. Thomson's lectures on the treatment of typhoid fever. They are admirably conceived, and they embody an amount of practical sense and scientific knowledge which reflects great credit upon their author. With your permission, however, I will supplement them with some observations which have been gathered from rather an extensive experience of my own in the same field.

There is undoubtedly a strong disposition at present to run away with *pyrexia*—to confound it with the disease of which it is a symptom, and to regard its arrest or abatement as the only indication worthy the consideration of the physician. To many minds there is no danger to be feared, save that which the *thermometer* signals and illustrates; and no remedies to be evoked, except such as *cold water* supplies or typifies. In a word, the views which the "German School" has promulgated relative to the disastrous influences exerted upon the organism by an elevated temperature, have been so enthusiastically adopted by the profession as to obscure the true pathology of typhoid fever, and to inspire a blind subserviency to the therapeutical dogmas recorded by Ziemssen *et id genus omne*.

Without entering into any formal argument to demonstrate the fallacy of these ultra ideas, I will simply oppose to them a few practical statements, respecting the reliability and the logic of which there can be no discussion.

1. Peyer's patches sometimes ulcerate even to the point of intestinal perforation, without the concomitant occurrence of any special elevation of temperature to indicate the existence of a typhoid infection.

2. The degree of heat developed in typhoid fever, and the virulence of the disease itself, do not sustain a necessary and invariable relation.

3. Patients constantly succumb after the temperature has reduced itself, or has been reduced by remedies, within what are esteemed the boundaries of security.

However important it may be in certain cases to subdue the *pyrexia*, the indication which presents itself in this respect should be met intelligently and guardedly. The physician should remember that the *heat*, with which he has to deal, is *not really the disease* to be combated, and that the remedies demanded are "heroic," and require the nicest discrimination in their employment. He should distinctly realize that, in laboring to reduce the temperature, he is only attacking *one* of the obstacles which interfere with the operation or exhaust the energy of that "principle of conservation" which the system requires, in order that it may be carried safely through the trying ordeal of the typhoid infection. And he should most rigidly guard against that fallacious infatuation which satisfies itself with a crusade against *pyrexia*, whilst it ignores the paramount obligations to strengthen the failing powers, to renew the wasting tissues, to utilize the hampered digestive processes, to limit the disastrous ulcerative action, to eliminate the contaminating products of the crude and unhealthy metamorphosis, and to assail *every* symptom which, by obstructing functions, or developing complications, or combining with essential phenomena, adds to the patient's discomfort or diminishes his chances of recovery.

As I have before indicated, *antipyretics* are powerful alike for good and for evil. They are, in fact, like the knife of the surgeon, which threatens disaster in one direction, while it heralds relief to another, and becomes a weapon of death instead of an instrument of mercy, by the slightest error of judgment or deficiency in dexterity. The gravest problem, perhaps, in the whole range of practical medicine is that embodied in the question of *when* and *how* to employ this "energetic" class of agents. Take *external cold*, for instance—the pet hobby of modern therapy. Whilst according to it all the efficacy as a "heat reducer," which the most ardent advocate can claim, who can estimate the dangers attendant upon its employment in typhoid fever, when the heat is especially feeble or the lungs are profoundly congested, or the skin is morbidly sensitive, or the kidneys are engorged and desquamative, or a constant tendency to collapse manifests itself *ab initio*? The lesson to be learned from its wonderful effects in pyretic conditions must be studied in conjunction with that which is taught likewise by the facts, that the morbid condition immediately preceding death by cold is one of *prostration*, and that the pathological phenomena immediately following such a result are an *accumulation of blood* in the right side of the heart and *congestions* of the viscera generally. The same may be predicated of *baths at a low temperature*, with the supplementary statement that the mechanical pressure of the water upon the surface of the patient, which is about one pound to the square inch, and the effects of the movements and manipulations incident to the process of bathing, are to be duly considered in estimating their advantages and their disadvantages as remedial agents. I know well that it will be regarded as rank rebellion against scientific progress to question in the slightest degree the efficacy of cold baths in the treatment of typhoid fever; and yet I feel constrained to say, that in my judgment, although they do possess great value as remedial agents when circumstances really justify their employment—as the abated sufferings and rescued life of many a patient emphatically attest—they are sometimes barren of results, often positively injurious, and generally used with little judgment or discrimination. Without recapitulating what has been said already respecting the dangers incident to an exclusive or an ill-considered antipyretic treatment, or dwelling upon the first of the supplementary statements offered above, I will say a single word touching the *second* observation made in that connection. In a considerable percentage of typhoid patients the tendency is *to syncope*, and death occurs from *asthenia*. A position of absolute recumbency and a condition of perfect repose become, therefore, essential elements in the treatment of such cases. When a life is trembling in the balance of an enervated and struggling heart, the slightest movement or exertion is fraught with peril, and may prove fatal. I would, therefore, lay it down as a cardinal rule of practice to except this class of patients—*ie.*, those in whom cardiac weakness, however it may be developed, is a conspicuous symptom—from the treatment by cold-water baths, because assured that they are prolific of disaster under such circumstances.

When *cold* is demanded and baths are contraindicated, the *pack* is usually resorted to, though from the rapidity with which heat is evolved, it is often difficult to keep up a proper temperature for more than a very brief period. *Ice applied to the spine* by means of *Chapman's bags* is an admirable substitute for the cold-bath, and a far more convenient and reliable means of reducing the temperature than the pack. No appreciable decline takes place after its removal, while the impression produced can be prolonged at discretion—two most important considerations in estimating its value as an antipyretic agent. *Injections of cold water into the rectum*, at frequent intervals, sometimes act wonderfully well. As a general rule, I have not found the diarrhœa increased by them, while I have repeatedly seen dysenteric symptoms subside under their employment. My father, who was an ardent disciple of Broussais, treated typhoid fever habitually and very successfully with injections of cold water, to which the tincture of opium was added in sufficient quantity to restrain the bowels; supplemented by a liberal supply of powdered ice, and of milk with lime water by the mouth; frequent dry cuppings over the abdomen and spine, and cold applied continuously to the shaven scalp by means of bladders filled with ice or iced water. This mode of treatment—I mean the cold-water injection plan—has just been revived by Dr. Folts, who has published a series of valuable papers in the *Lyon Médicale*, giving his observations and experience on the subject. He states that they exert a *local* and a *general* action. The *local action* consists in a cooling sensation, accompanied by intestinal contractions; while the *general action* is illustrated by slackening of the pulse, marked diminution of temperature, abatement of thirst, augmentation of secretion, and quietude of the nervous system. In his judgment they constitute the most valuable remedy in typhoid fever yet known to the profession; and after a long experience, I am prepared also to indorse them in a very emphatic manner.

Injections of iced water under the skin, also, answer admirably when the pyrexia is especially prominent and persistent. They not only reduce the heat, but control in a marked degree many other important symptoms. An ounce of ice water can be injected daily, by dividing it in two portions, and distributing them over different parts of the body. When *quinine* is not well borne by the stomach, or the patient refuses it, advantage may be taken of these injections to introduce it into the system; and they can, likewise, be made vehicles for the administration of *peptones*, which, according to the demonstrations of Stricker and Oser can be thus absorbed without difficulty. Diluted milk may be cooled down and injected in a similar manner, to act as an antipyretic and to serve as a *nutriment* as well, since Menzel and Pero have shown that nutrition can be effected in this way, while Kreugg has not only confirmed their experiments, but proved that other nutritious matters can be administered hypodermically with equal advantage and a like impunity. While referring to hypodermic injections, permit me to say, that I first injected *brandy* under the skin in the early part of the year 1867, as the *Baltimore Medical Bulletin* will show, and that I have continued so to employ it, in extreme cases, up to the present moment. Can you tell me whether or not it had been administered subcutaneously prior to that date?

Quinine is, unquestionably, a valuable agent in the treatment of typhoid fever, both from its anti-periodic and its febrifuge properties. Malaria plays a far more important *rôle* in the clinical history of this disease than is generally supposed. As it is almost impossible to find any one who has not been at *some period exposed* to the subtle influences of this peculiar poison, so is it equally difficult to meet with an affection—especially a *fever*—over the phenomena of which it does not exercise *some* control. Independent of those instances in which the regular occurrence of exacerbations constitutes a prominent feature, there are multitudes of others to which it adds an incident or a complication, whereby the infection is intensified or the system rendered less capable of resistance. As a general rule, therefore, *quinine* is indicated in typhoid fever, on account of its *antiperiodic* properties, as the agent by which the malarial incident or complication can be most readily removed. The well-known *antipyretic* properties of this drug render it an important adjunct in the treatment of typhoid fever. It should not, however, be administered too liberally—not according to the demands of enthusiasm, but to the dictates of experience. If it be administered in "heroic doses" or very frequently, it overdoes the work required of it, and produces a *cinchonism* which adds to the burdens of the already struggling system, whilst it increases the derangement of the nervous centres and intensifies the disturbance of the digestive function. Doses of from *ten* grains to *fifteen* grains, three times daily, answer better than those of larger quantities more rapidly exhibited. Quinine should be given with especial caution when the *pulse* is *hyperdicrotous* or after *conception* has *occurred*, since it exerts a *sedative* influence upon the heart and a *stimulating* action upon the uterus in a very marked degree. I have sometimes seen the febrifuge properties of quinine decidedly increased by the addition to each dose of the quarter or the sixth of a grain of morphia and two drachms of the sulphate of magnesia, with water enough to dissolve them properly—say one ounce and a half.

Calomel is a good remedy, but it should never be employed, according to my experience, after the seventh day. I have repeatedly seen intestinal perforation follow its administration in the advanced stages of the disease. As a general rule, it is better borne and should be more freely given, when meningeal, hepatic and malarial complications connect themselves with the febrile attack.

Inunction is valuable in all diseases which are characterized by a hot, harsh and dry skin, and especially so in typhoid fever. By restoring the functions of the sebaceous and the perspiratory glands, and relieving the irritability and the tension of the cutaneous surface, it assists in removing effete matters from the blood, and indirectly stimulates the other organs to an abandonment of their torpidity. In a word, it re-establishes the normal equilibrium and legitimate relation between the integument and the viscera, and transforms the *fons et origo* of an infinite variety of morbid reflex actions into a source of healthful impulses and of physiological sympathies. The *reduction* of heat which follows oleaginous inunction in typhoid fever settles the question in regard to the absorption of fatty materials by the skin, and demonstrates the reliability of the views of Bernard and Walkenstein in that regard, since, if carbo-hydrogenous elements did find their way into the system under such circumstances, increased combustion, with a consequent *elevation of temperature*, would be the natural consequence.

I am convinced that *warm poultices* do more harm than good in this disease. While they are agreeable to the patient and *convenient* to his attendant, they really increase the heat and concentrate it upon that portion of the body which is the special seat of morbid action. They are prolific sources, in truth, of meteorism, hemorrhage, diarrhœa, and intestinal perfora-

tion. Cold, applied by means of flannels saturated with iced water or bladders filled with ice, should be employed in their stead. Space will not permit me to say what I had proposed in regard to *turpentine*, but I cannot conclude without putting in a word for it. Although by no means a "specific," nor of universal applicability, yet, as a general stimulant to the system, and a special excitor of the secerning organs—particularly the skin and kidneys—it has scarcely a superior in the Materia Medica. In the later stages of the disease, when the tongue is specially dry and cracked, the abdomen unusually tympanitic and tender, the skin excessively dry and harsh, the kidneys decidedly insensible and torpid, the pulse thready and *monocrotous*, it frequently acts like a charm, not *curing* the disease, of course, but giving to the crowded system "a fairer field and a fuller opportunity for resistance."

Alcoholic stimulants, as a general rule, are not required, since they increase combustion and develop pyrexia. When it is necessary to resort to them, as in threatened collapse, or when the pulse and temperature are apparently in contradiction—the one being excessively frequent while the other is not excessively high and *vice versâ*—or after hemorrhage or in conjunction with exhaustive diarrhœa, etc., etc., "dry" *champagne*, either completely frozen or ice cold, should be selected. Fortunately for humanity, the chimeras of Todd and kindred "alcoholists" have had their day, and brandy is no longer the panacea which enthusiasts "swear by." At best this "plan of stimulation" was like holding a candle out of a window and mistaking the coruscations of an accelerated combustion for the indices of an increased intensity and duration of illuminating power. Patients got *better*, or seemed to, but they *died in the end*, a little faster and more certainly than before.

Sulphate of copper is the best remedy I know of for the diarrhœa of typhoid fever. Half a grain should be administered every second or third hour, combined with very small quantities of morphia or opium, and associated appropriately with camphor, copaiba, cubebs, turpentine, or creosote. This drug seems to exert some special curative influence over the ulcerative action which takes place in the intestinal glands. Sometimes typhoid fever associates itself in a very striking manner with epidemic erysipelas, and, when such a relation exists, the *mineral acids*, or *the hyposulphite of soda*, or the *muriated tincture of iron* can be used to great advantage. The fact of this association, and the beneficial action of these remedies, with other circumstances, has tempted me to regard many a so-called case of typhoid fever as a veritable erysipelas of the glands of the small intestines.

With reference to *nourishment*, I would most heartily endorse all that has been said in favor of milk as an article of diet. Like cod-liver oil in certain cases, it is both a *medicine* and a *food* in typhoid fever. It should, however, *generally be skimmed*, and *never sweetened*, since oleaginous and saccharine elements are *calorifacients*, whilst a certain amount of lime water should be combined with it, unless an acid treatment be decided upon. Occasionally, however, milk disagrees with the patient, and becomes a source of disturbance instead of support, and the physician should remember this fact, and be prepared to meet it promptly. I am convinced that *solid food* is often a desideratum, and that great advantage results in many cases from the employment of *raw meat*. By giving *pepsine*, or, better still, *pancreatine*, especially when tympanitis is very prominent, its digestion is secured, and nutrition is correspondingly reinforced.

There is one remedy, as yet but little known, which is destined to a conspicuous career in the therapy of typhoid fever. The *monobromide of camphor* not only possesses the medicinal virtues of the bromide family and of camphor in a happy combination, but is preeminently *antipyretic* in its action upon the economy. M. Bourneville, after many careful experiments, has demonstrated that the monobromide of camphor lowers the temperature *rapidly and decidedly*, whilst it lessens the frequency of the pulse, diminishes the number of inspirations, and abates nervous excitement, without disturbing the digestive functions. These conclusions have been thoroughly verified by the observations of M. Pothault, who declares that he has reduced the temperature of inferior animals as much as 3° C. in an hour, and found that the subsequent process of heat evolution is unprecedentedly gradual and protracted. From these statements it will be at once perceived that this drug possesses precisely those remedial elements which are most required in the treatment of typhoid fever, and that its introduction is an invaluable acquisition to modern materia medica. Having recently administered it with admirable results, it gives me pleasure to suggest its employment to my confrères. The dose of the bromide of camphor is from *three* to *ten* grains, repeated every third hour until a decided impression has been made upon the temperature or the circulation.

The best *hypnotics* are either *chloral* or the *bromide of potassium*, in combination with *codeia* and the *tincture of sumbul*, according to the following formulæ:

℞. Chloralis hydratis..... ℈ij.
Codeiæ..... gr. i.
Sumbul. tincturæ..... ♏ iij.
Aurantii syrupi..... f ℥ ss.
Aquæ cinnamomi.....q. s. ad f ℥ iij.

M.—S. One-half at a dose, and the remainder in three hours, if necessary; or,

℞. Potassii bromidi..... ℈ i.
Codeiæ..... gr. i.
Sumbul. tincturæ..... ♏ ij.
Aquæ cinnamomi.....q. s. ad f ℥ iij.

M.—S. One-half at a dose, and the remainder in three hours if necessary. The chloral mixture should be given without syrup, if the patient can be induced to take it, for reasons previously explained.

As I have already written so much more than was originally intended, I must reserve my observations on *cardiac* and *arterial sedatives* for another occasion; and, with the hope of pardon for this very crude and protracted communication, I beg to subscribe myself very respectfully your obedient servant,

EDWARD WARREN, M.D.

No. 33 RUE CAUMARTIN, PARIS.

THE RELATIONS OF PHYSICIANS AND DRUGGISTS.

TO THE EDITOR OF THE MEDICAL RECORD.

PHYSICIANS and medical journals seem to delight in "showing up" druggists in anything but a favorable light, and it is time, I think, to put in a word for what may be called the *other side* of the question at issue. Is there a business man who believes that a drug-store devoted exclusively to putting up physicians' prescriptions "would pay"? This is a question that every man entering upon a business must seriously consider, "Will it pay?" Occasionally an attempt has been made to transact a purely retail drug business, but the failures have been so signal, that the attempt has been rarely repeated. Even physicians, who have had much

to say upon this subject, have failed to encourage any such effort, choosing rather to send their prescriptions to those who dealt in Yankee notions, cigars, patent medicines, homœopathic specifics, and soda and saline waters as well as drugs. Whether *percentage* had or has anything to do with the directions of these immaculate doctors, it does not at present become me to say. And now what just objection can be offered against a druggist dealing in miscellaneous articles, so long as this trade does not interfere with the proper filling of prescriptions? I take it that there is no good ground of complaint, and that objections often urged are fancied rather than real. Much complaint is made on the part of some, that druggists keep on hand and deal in homœopathic remedies. I presume it to be true that if these remedies had no sale druggists would not deem it worth while to keep them on hand. But it is useless to ignore the fact, that the number of people who employ homœopathic physicians and remedies is neither small nor, in most matters, greatly lacking in intelligence. And just where lies the great moral turpitude of dealing in what these people want, is not strikingly apparent to an unprejudiced mind. As to the crime of dealing in patent medicines of various kinds, there may be some room for argument. It would, without doubt, be a sweeping statement to say, that they, one and all, are worthless—that they are put up solely with a view to sale, with no regard whatever to their curative virtues. If such were the case, if they had no merits whatever, their sale would probably not be long continued. It may be sufficient to say, that not a few reputable physicians use in their own families and employ in practice—perhaps rather *sub rosa*—patent medicines, of which they know not the ingredients, but which they have confidence in, gained simply from observing the favorable effects following their use. It will be easy to deny this, or to say that such physicians are not reputable, or that in so doing they have broken a solemn obligation, but the fact I have stated can be confirmed upon inquiry at almost any drug-store.

Lastly, druggists are charged with usurping the prerogative of the doctors in *prescribing* for such as ask them to do so. This is a serious charge, and should be carefully examined into. In the first place, who gave M.D.'s an exclusive right to recommend or direct what the sick and ailing may or must take? May a mother or nurse use boneset or anise-seed tea without asking the permission of the learned doctor? May not a friend or neighbor suggest a dose of ipecac or spiced syrup of rhubarb, or a hot bath, without a doctor's license? And when a sufferer from neuralgia or from a racking cough prefers to ask the druggist for a remedy, rather than consult the doctor, it may not be flattering to the doctor's opinion of his exclusive right to prescribe drugs, or it may be evidence of a want of good judgment on the part of the person afflicted; still, I am not aware that any one has a right to restrict him or to dictate to him in the choice of a medical adviser.

It is not my purpose to advocate or to justify indiscriminate prescribing by mere druggists, yet I am inclined to think there are frequently circumstances mitigating what the doctors style a heinous offence.

Some of the doctors who have much to say in relation to this matter send few patients to drug-stores for medicines—are themselves dispensers of pills, powders and liquids from a miniature peripatetic drug-shop, carried about with them in the shape of saddle-bags, or the more recent and fashionable medicine chests and pocket cases. If I observe rightly, this custom of carrying a small stock of medicines, in cities, is rapidly increasing. I am not inclined to condemn the practice in itself, while it is restrained within proper bounds, for I can see that it has many good features to recommend it. But it seems to me that if the right of prescribing *does* belong exclusively to the doctors, the business of dispensing drugs belongs *as* exclusively to the pharmacists.

I presume the mutual relations of the parties to the contest will, after all, in some measure regulate themselves, and my advice to both parties I offer in the slightly amended doggerel:

> "Doctors and druggists, each pursue
> The course that seems the best to you,
> And let the grumblers grumble."

A. W. Adsto.

140 Park Place, Brooklyn.

Medical Items and News.

New York Academy of Medicine.—The following officers were elected at a meeting of the New York Academy of Medicine, held January 6, 1876:

For Vice-President—Dr. Fordyce Barker.

For Trustee—Dr. S. T. Hubbard.

Committee on Admissions—Dr. T. M. Cheesman.

Committee on Medical Ethics—Drs. O. White and M. Morris.

Committee on Medical Education—Dr. C. C. Lee.

Committee on Library—Drs. J. H. Hinton, J. R. Leaming, E. D. Hudson, Jr., C. M. Allin, and George Bayles.

Drs. J. W. McLane and H. F. Quackenboss were elected resident Fellows.

Army News.—Smith, R. E., Assistant Surgeon, has been assigned to duty at Fort Bayard, New Mexico.

The Prize Committee, appointed by the Executive Committee of the Alumni Association of the College of Physicians and Surgeons, at their meeting on March 2d, 1875, consists of the following gentlemen: Prof. Henry B. Sands, M.D., Dr. Edward C. Seguin, Dr. Ellsworth Eliot.

As the Register and the college catalogue both give a different list of names, it seems desirable that the correct one should be published.

Miss Isabella G. Clark, having passed the major examination of the Pharmaceutical Society, was admitted as pharmaceutical chemist on the 15th of December. There are several ladies, it is said, on the register as "chemists and druggists," but this is the first instance in Great Britain in which a lady has passed the major examination as pharmaceutical chemist.

Professor Wilhelm Boeck, of Christiania, the well-known syphilographer, whose visit to the United States a few years since made him many friends, died on the 10th of December. His efforts to introduce syphilization as a means of prophylaxis against the disease are well known, but have secured him no followers.

Weekly Bulletin of the Meetings of Medical Societies.

Monday, January 17.—N. Y. Acad. of Med., Obstetric Section, No. 12 W. 31st st.—N. Y. Society of Neurology and Electrology.

Thursday, January 20.—N. Y. Academy of Med., 12 W. 31st st.

Friday.—N. Y. Medical Journal Association. Dr. L. D. Bulkley, "Study on Cases of Skin Disease treated at Demilt Dispensary, 1875."

Original Communication.

THE TREATMENT OF SYPHILIS.

BEING A PART OF ONE OF THE ANNUAL REPORTS ON THE PROGRESS OF MEDICINE AND SURGERY * PREPARED FOR THE MEDICAL JOURNAL ASSOCIATION OF THE CITY OF NEW YORK.

By R. W. TAYLOR, M.D.,

PHYSICIAN TO CHARITY HOSPITAL, ETC., ETC.

MR. PRESIDENT AND GENTLEMEN:—It has been my object in preparing this report to treat of subjects most interesting to a Society such as this, composed principally of general practitioners. Thus, its character and scope differ widely from a similar *résumé* prepared exclusively for specialists. Having, according to the wish of the Society, to include articles published since January, 1874, there was on my hands such a mass of material that it would have been impossible in the time allotted to me to have presented them, even in brief; therefore I have selected such of these subjects as to my mind were most interesting to the members; such, indeed, as are most intimately connected with the daily wants and experience of the general practitioner. As the treatment of syphilis is such an important subject, I have devoted considerable space to its review.

Since January, 1874, a number of important articles have appeared on the treatment of syphilis. The greater proportion have been written by believers in the value of mercury, while antimercurial views have been urged by a few. By far the most important paper, by reason of its clearness of diction, solidity of argument, and comprehensiveness, is the one by that careful observer of syphilis, Mr. Jonathan Hutchinson. His paper, "Use of Mercury in Syphilis" (*Lancet* 1874), bears the impress of long and patient research, unattended with prejudice, and it is fair to suppose that it has and will continue to exert an influence salutary in its effect upon the medical world. As a model of clear and calm reasoning and pertinent argument the paper takes high rank. Hutchinson's conclusions are as follows, which are here given very briefly.

Mercury is the vital antidote to syphilis, curing the disease, as shown by cases of subsequent perfect health after a first attack which is followed by a second.

A cure depends upon the stage of development attained by the disease before treatment is instituted. Mercury must be given for a long time in considerable quantities, avoiding salivation, which is injurious. Susceptibility to the agent indicates mild doses.

Give the remedy as soon as indication is noticed, as secondary symptoms will then be very mild if they occur, and they may not.

Mercury is powerful in delaying the second stage, and repeated outbursts indicate that its administration has not been sufficiently active rather than that the agent is inefficacious.

Tertiary lesions appear in proportion as the secondary stage has been long and severe, and are less frequent when mercury is given early.

This drug does not injure the health if given cautiously, and it may be administered even in ulcerative conditions, as it is not contraindicated by any particular form of syphilis. Iodide of potassium is inefficacious in the primary and secondary stages, while mercury acts well where it fails.

The mode of administration is of no great importance, provided toxic effects are avoided. The whole text of this paper is worthy of careful study. I may here remark, that lengthy criticism by me is now inadmissible; but I could suggest that very strong arguments may be brought up against giving mercury quite as early as advised by Hutchinson, for I am disposed to think that the cases are exceptional where this is needed, and that a much better result attends delay until the evolution of secondary symptoms.

Influenced by these arguments, as well as by those of Fournier, of Paris, Dr. C. R. Drysdale, who has long been known as an ardent antimercurialist, has recanted his former doctrines, and now appears in the ranks of mercurialists. In a paper recently read ("On the Antecedents and Treatment of Tertiary Syphilis") this author makes a profession of faith, and manfully acknowledges his conversion. The chief value of his paper is his assertion, that he has seen tertiary lesions follow a non-mercurial treatment. Though this fact is well known, it is important in this connection, as one of the strong tenets of the antimercurial faith is the alleged baneful effect of mercury in producing tertiary lesions, which by many are said to be the result of that drug, and not the manifestations of the disease at all. Apropos of this subject, an article by Van Buren and Keyes ("A Contribution to Syphilidology," *Archives of Dermatology*, Jan., 1875) affords food for thought, as there are in it detailed two cases of very severe late syphilitic lesion, in which no mercury had ever been given. Drysdale having so recently adopted the use of mercury, is, of course, somewhat chary in its administration, and thinks it valuable in the secondary stage alone. It must be confessed that his article is of no practical value, though by experience in his new field he may make useful observations. In a doctrinal point of view these two articles are the most important of any of recent date. There have been others published relating to the various modes of treatment, which are of unequal value.

In the issue of November, 1874, of that very valuable and practical journal, *The Practitioner*, is a characteristic, short, and suggestive paper on "The Use of Mercury in some of the Obscurer Forms of Syphilis," by J. Milner Fothergill. This is one of those peculiar articles which, if not attentively read, is passed over as being of little value; yet if read attentively, and re-read, its merits are appreciated, and it then offers food for careful thought. The obscurer forms of syphilis meant by the author are those late, and in some cases difficult of recognition, conditions of impaired nutrition which are so often met with in general practice, due both to acquired and inherited disease. The author shows that while mercury may, if injudiciously administered, induce tendency to mal-nutrition, it may, by careful employment, produce the best results. He says, very truly: "The fact should appear that there are conditions of anæmia associated with syphilis, just as there are states of anæmia found in connection with malarial intoxication, with suppressed gout, or with lead poisoning." And further on: "Under such circumstances the building up of the blood by iron is frustrated by the action of the poison. The removal of the virus by its own specific—quinine, potash, and iodide of potassium—often relieves the anæmia ere iron be given. So in syphilis: the administration of mercury resulted in the palliation of the anæmia of syphilis, and facilitated the blood formation under the hæmatenic." There are certainly few

* Read November 26, 1875.

who will deny this clear statement. Going on further in the study, M. says: "One of the most unfortunate matters in the therapeutic use of mercury has been the forgetfulness on the part of those using it of its generally destructive action on the blood and tissues, and, indeed, not that only, but even a spare diet has often been conjoined with it. No wonder, then, that the mischievous consequences of the administration of mercury became vividly apparent. But can we say that some fault does not lie at the door of the administrator who is oblivious of this action?" It is certainly gratifying to find in an article such sound views, and it is to be hoped that they will be extensively read. The last question quoted is one which is particularly striking to those who read the various wild attacks of men, who generally are those of little experience, against this invaluable agent, and an impartial observer may certainly with justice inquire whether or not the agent is at fault in cases of disaster by its use, or whether it is due to some shortcoming of its administrator. Personally I have arrived at a high appreciation of the value of mercury by impartial observation of a very large number of cases of syphilis, having followed in a comparative manner all forms of treatment. I have elsewhere expressed myself as strongly in favor of its use, though, of course, I recommend that all due caution should be exercised. Fothergill puts the question as to the use of mercury in syphilis in a very apposite manner. He says: "What we should strive after is to get the good effects of a mercurial course upon the syphilitic virus, and its consequential results, while at the same time we protect the organism against the evil effects of the action of the mercury itself." We ourselves hardly think that the evil effects are really as great as they appear to the mind of Fothergill, who in his early education was taught to regard it as a poison, being later on converted to its adoption by successful experience. The necessity for the prolonged treatment of syphilis is clearly shown by the author, whose remarks thereon are very practical.

Another paper on the treatment of syphilis, especially of the secondary stage, is from the pen of Mr. Milton, of London, "On the Treatment of Secondary Syphilis" (*Edinburgh Med. Jour.*, March, 1875). The author is an advocate of mercury judiciously administered. He calls attention to the futility, even injuriousness, of giving mercury to, or even attempting to treat persons of irregular habits, especially those who indulge in drink. The directions for treatment, as set down by Milton, are very judicious, and include a preparatory course, directions for the avoidance of injurious effects, and for gaining all the curative benefits of mercury, and for a subsequent or supplementary course with the iodide of potassium. He advocates the plan of what we now term interrupted treatment, using in the main moist mercurial fumigations. Even if a person does not regard as necessary all the details advised by Milton, he will concede that they may be beneficial, and that the scheme of treatment recommended is based upon common sense, and is the result of long and careful study. The article is well worth study in connection with the others already considered. There is in it a temperate manner of statement, which is becoming to a scientific inquiry. Another noticeable article is by J. R. Lane, of London, which is the result of his study and observation for twenty-three years. It contains no new facts or striking assertions, yet as a reflection of such a long experience it is of much value. The author is an advocate of mercury and iodide of potassium in the treatment of syphilis, the indications for which he reviews in a very candid manner. He is a believer in the curability of syphilis, as shown by instances of reinfection, and by the fact that those who have been syphilitic may in time beget healthy children. Lane thinks that mercury should be given as soon as the chancre is pronounced to be syphilitic; by so doing he thinks he has in many cases prevented any further manifestation of the disease. He likewise, while he endorses the agent, advises caution in its use, and in phagedenic complications, its discontinuance. He is disposed to rely upon the natural tendency to resolution in cases of mild secondary disease, and, while to persons of good health he gives mercury, he proceeds with caution in those of the so-called strumous diathesis. While he advocates, like Ricord, protracted courses of treatment, he does not think that subsequent medication by iodide of potassium is necessary. As to the form of the drug, he prefers blue-pill, guarded by opium, and thinks that administration by the mouth is preferable to other methods. Iodide of potassium is much relied upon by him in the tertiary stage, and he thinks that its power, as well as that of other iodic salts, is intensified by the addition of carbonate of ammonia, and that the therapeutic value is enhanced by the simultaneous use of the decoction of sarsaparilla, and he regrets the disuse into which the latter preparation has fallen. The remarks on the intolerance of iodic salts are of practical interest. Lane says that he has descended as low as to half a grain of iodide of sodium, and by slowly accustoming the system to it, he has raised the dose to twelve and fifteen grains. He mentions a case of intolerance of the potassium salt in which he produced tolerance of the sodic. As to the value of the iodides in secondary syphilis, we are glad to see that Lane is very emphatic, as in that stage he considers them harmful. Among German authorities no one is deservedly more worthy of attention than Von Sigmund, of Vienna, whose articles on the treatment of syphilis, particularly by the inunction cure, are noticeable for their practical character as well as a minute knowledge of the indications for the varying phases of the disease. His latest contribution was written for the *Italian Journal of Venereal and Cutaneous Diseases*, issue of February, 1874, and is entitled, "The Proper Time to Commence the Treatment, and the Choice of the Method." The pith of the article may be stated in the following conclusions: 1. The methodical general treatment of syphilis should be, as a rule, commenced when undoubted signs of the general disease are manifested, namely, at the evolution of the secondary lesions. 2. Mercurial preparations are to be preferred. 3. Treatment should be kept up uninterruptedly or periodically, according to circumstances, as long as the symptoms of the disease persist or reappear. 4. Intercurrent diseases should be treated as in a non-syphilitic subject. 5. Hygienics and tonics should be used in each case, and the diet should be supporting. He prefers in general inunctions, uses the bichloride of mercury subcutaneously in appropriate cases, and has derived benefit from calomel thus administered, which, if used in small quantities, will not produce abscesses. He urges care in the administration of medicine, and an avoidance of overdosing. As an adjuvant to mercury, he thinks iodide of potassium to be of benefit, but of no further value. The paper, though short, is eminently useful and practical, and we regret that space does not permit a fuller consideration of many of its points. The opinion that mercury should be withheld until the evolution of the secondary stage is particularly noticeable, and coming from such a man deserves attention; certainly in all but exceptional cases this method is, in the end, most satisfactory. Schutzemburger,

("Radical Cure of Syphilis by Subacute Hydrargyrosis" *Lyon Méd.*, July, 1874), also is an advocate of mercury, and he believes that by it syphilis may be radically cured. His method of treatment is by a system which he calls subacute hydrargyrosis; in other words, he keeps a patient for a period of time under the influence of mercury in a mild manner, without the production of any toxic effects. He also prefers inunctions above all other methods, as he thinks that they act more rapidly and surely on the system. He advises a preparatory treatment, such as baths, sudorific decoctions and purgatives, after which he uses, every second day, an inunction of 30 to 90 grains of mercurial ointment, in general 30 to 25 of such being sufficient. It is necessary to stop if full salivation is induced, but not on account of mild buccal lesions. S. says that he has thus cured many severe cases. The great value of the inunction cure is further attested by a remarkably forcible paper by Panas, "The Treatment of Syphilis by Mercurial Frictions" (*London Medical Record*, January, 1874.) In speaking of the alleged disadvantages of this method, he thinks that they are much overstated and readily avoided, and that the advantages far preponderate in their favor. He considers that stomatitis should not, and need not, be induced, and he gives directions (of course already well known to us) for its avoidance. When mercury enters the economy through the skin, Panas thinks that it is not decomposed in the circulation as when taken by the alimentary canal. The usual quantity of mercurial ointment used by P. is 90 grains daily. He claims that he has thus cured many severe cases, and speaks with emphasis of the necessity of treating infantile syphilis in this manner. Though the paper contains nothing really new, it is of much interest on account of the confirmation which the experience of the author gives to claims which are extensively made for this valuable treatment. Certainly the author is perfectly correct when he states that it acts very beneficially, particularly in hereditary syphilis. His remarks on the failure of the proto-iodide and the bichloride of mercury are somewhat surprising, particularly as to the former. Evidently impressed with the views advocated by Panas, Augustin Guénel, of Paris, takes as the subject of his inaugural thesis ("Etude sur les Frictions mercurielles dans des formes graves de la Syphilis," Thèse de Paris, 1874), the study of this method in severe forms of syphilis. Though his personal experience with the inunctions is necessarily limited, he has collated with great care, and has well reported, a large number of cases of various neuroses, presenting severe lesions of syphilis, in some of which very delicate tissues were involved, in which a cure or great benefit resulted from their use. As showing, then, the experience of many prominent French surgeons, Guénel's conclusions, which are as follows, are worthy of record: 1. Mercurial frictions, properly used, have none of the drawbacks which is attributed to them. 2. They do not disturb the alimentary canal. 3. They are successful very often in cases where internal treatment has failed. They should be employed immediately in grave forms of syphilis, in which the lesions compromise the life of the patient or an important organ. 4. They are especially indicated in syphilis of the cerebro-spinal system, and of the tissues of the eye. 5. They are of as much value in the tertiary as in the secondary period. This latter conclusion suggests to us a capital paper by Dr. Sturgis "On the Use of Mercury in the later Stages of Syphilis (*American Journal of Medical Sciences*, January, 1875), in which he clearly shows the necessity for the administration of mercury in late stages of syphilis. There undoubtedly is a lurking opinion in the minds of many, whose experience in the treatment of syphilis is limited, that the iodide of potassium is the only remedy necessary in tertiary syphilis; some, indeed, go so far as to think not only that mercury is contraindicated, but that it may even be then harmful, if not unnecessary.

Sturgis clearly shows that the iodic salt is often powerless against late syphilitic lesions, or that its action is unnecessarily slow. In such cases Sturgis states that a combination of mercury with the iodic salt is necessary, an opinion which I heartily endorse, as almost every day I meet with instances showing this necessity. Sturgis also gives preference to inunctions applied continually to the soles of the feet, and advises that the iodide should be simultaneously administered. He calls attention to the value of the oleate of mercury as a readily absorbed, cleanly, and efficacious agent, which may be used of a strength as high as 20 per cent. The bichloride alone is not well thought of by Sturgis. The combination treatment, as thus indicated, should be used until all lesions have disappeared, or until the condition of the patient renders it necessary. Acton has for many years been known to be an advocate of the use of mercury in syphilis; and in a recent address before the British Medical Association ("On the Modern Treatment of the Advanced Stages of Constitutional Syphilis," *British Med. Jour.*, Aug., 1875), he reiterates his views. He urges the necessity of preventing syphilis, and states that he has found that in Edinburgh it is very severe. In the secondary stage he advises mercury; thinks that the iodide of potassium is only good in the tertiary stage, and that a mixed treatment is beneficial in many instances of late manifestations. Very similar views are offered by J. K. Spender ("The Treatment of Syphilis," *Lancet*, 1874), who has from time to time written on the treatment of syphilis. He thinks that in secondary syphilis a mixed treatment, in some respects differing from the one in vogue among us, in that he gives the mercury in the form of gray powder instead of one of the iodides, or the bichloride combined with iodide of potassium. In the tertiary stage, however, he uses the combination with the bichloride, together with tincture of bark. The benefits of most mercurial fumigations have been treated of by several authors. Foye, of Boston, brings out a very handsome little volume, entitled "The Treatment of Syphilitic Disease by the Mercurial Vapor Bath," 1874. The work is a curious mixture of the views and cases of Langston Parker and Henry Lee, with a few unimportant additions by the author. As endorsing the treatment, the views of Foye may be interesting, but there was little necessity for a book of the kind. It may be stated that the apparatus for this treatment, as devised by the author, is both simple and complete. Mr. J. St. John Wilders ("The Treatment of Syphilis by Moist Mercurial Fumigation," *British Med. Journal*, Jan., 1870), takes exception to what he considers to be slighting language of Lane in the paper already considered, and writes a very eulogistic contribution as to the value of moist mercurial fumigations in syphilis. Wilders was the pupil of the late Langston Parker, and is equally as zealous in favor of this treatment as was his predecessor. He claims that the treatment is neither troublesome nor dirty; has no depressing influence on the patient, but is, on the contrary, a cleanly, rapid, easily manageable method, powerful in action, and least of any harmful to the constitution of the patient. In speaking of ninety-one cases, treated and reported by Parker, he says: "I can most fearlessly affirm that they are a trustworthy record of the marvellous efficacy of this treatment." In support of his

assertions he details a bad case, which being uninfluenced by other methods was happily cured by the vapor-bath treatment. It is somewhat singular that in France, where the study and treatment of syphilis has been carried on by so many observers, that the mercurial vapor baths have not until recently been used. Perhaps this is an instance of a scientific exclusiveness on the part of the French which is now happily passing away in a measure. Horteloup ("Traitement de la Syphilis par les Fumigations mercurielles," *La France Médicale*, 43 and 44, 1875) details his experience during the years 1873 and 1874 in the treatment of 145 syphilitic patients having such lesions as buccal mucous patches, the same in an hypertrophic form on the anus and scrotum, as well as early exanthems, such as roseola, simple papulæ, and those with slight ulceration. Twelve of these treated early in his experience were not benefited, and he thinks that the want of success was due to his then experience. There were 43 who were decidedly ameliorated, some of whom would have been cured had they persisted in the treatment. But the number really cured was 81, in whom the disease assumed a mild form. The average number of fumigations used was 13, and the agent calomel, according to the plan of Lee, of London. H. thinks that in 32 cases he failed; some of them were examples of precocious syphilides, and others of the dry squamous form. In many of these he used as many as 56 fumigations. In several cases of deep ulceration, and in certain tubercular eruptions, he observed great benefit from the simultaneous use of the iodide of potassium, with the bath treatment. As to the drawbacks, such as stomatitis and a sense of suffocation, he thinks that they are very trifling and readily obviated. Horteloup leans to the opinion that more benefit is derived in cases of superficial ulceration than in those of dry scaling syphilides. This latter experience strikes us as being peculiar, as in very many instances of intermediary and late-scaling syphilides we have found these baths to remove them when they had resisted all other methods for a long time, and carefully employed. According to Horteloup, moist calomel fumigations may be employed for syphilis in the following conditions, administered alone: in cases of early ulcerating rashes, mucous patches, impetigo (sic), ecthyma. 2. Administered simultaneously with the internal use of iodide of potassium, they are of benefit for the later lesions: Tubercular, ulcerating, pustulo-crustaceous, and deep ecthyma. As a record of experience the paper of Horteloup is worthy of study.

The value of natural sulphur waters in the treatment of syphilis has also been studied by several observers. Two brochures of pretentious size have been written by physicians who have large personal experience in this method of treatment at the springs. The first is by Schuster ("Bemerkungen zur Behandlung der Syphilis," Berlin, 1874), while the second is by Reumont, who has previously written two works on this subject. They both reside at Aix-la-Chapelle, and evidently have studied the question as to the indications for the advantages and mode of action of the baths, and of the waters taken internally, in a very praiseworthy manner, and there is in their works an absence of that vein of empiricism so frequently met with in such productions. The chief value of this method of treatment is in late chronic and obscure cases, and the facts given confirm what we already know of the value of this combined internal and external treatment. No noticeable facts or new views are brought out, as both works are a repetition of what we already know. In the same vein is the Parisian Thesis of St. Paul ("Étude sur la Medication thérmale sulphureuse," 1874), whose work is a compendium of facts observed by others. Another advocate of this treatment is Dr. Page Bordes, who claims ("Du Traitement des Maladies syphilitiques par les Eaux minerales d'Aulus." *Tribune Médicale*, Aug., 1874) that the mineral waters of a spring at Aulus, a little spot in the Pyrenees, are of great benefit in the treatment of bad cases of syphilis, and that the natural advantages of the place are excellent in a hygienic point of view. Finally as to this method Grandidier ("Ueber Lungen Syphilis und ihre Heilbarkeit durch die Schwefelquellen zu Neundorf," *Berliner klin. Wochenschrift*, No. 15, 1875) states that among several hundred cases of constitutional syphilis he has treated thirty with lung affection. The patients were adults, and the lesion most commonly involved the right middle lobe near the base, very rarely the left. The treatment was either by the waters alone, or combined with anti-syphilitics. One or more seasons at the springs nearly always effected a cure, there being no relapses. I give the results without comment.

The treatment of syphilis by hypodermic injections of corrosive sublimate has also been the subject of brochures and papers, in Theses of Paris by Cotte and La Moaligou, and in articles by Cullingworth (*Lancet*, Nos. 19, 20, 21, 1874), and Profeta (*Annales de Dermat. et Syphilographie*). No new facts whatever are adduced, and the general conclusion of the authors is, that in a limited degree and in certain peculiar cases this method is valuable. Such is the accumulated knowledge to be gleaned from papers published since January, 1874, by the advocates of the use of mercury in the various forms in syphilis. Let us now review the labors of the antimercurialists. The most pretentious work is that of Proksh, entitled, "Antimercurial Views as to the Treatment of Syphilis." His work is an octavo of nearly two hundred pages, and its perusal betrays a lack of knowledge as well as a bigotry of mind of the author. He is a decided antimercurialist, and sums up his conclusions as follows: Mercury is not an antidote to the syphilitic poison. It merely causes the more rapid disappearance of its lesions or symptoms. 2. We do not know the effect of mercury, or even of syphilis. 3. Syphilis is cured by the healing power of nature alone, assisted by a simple topical, symptomatic, and dietetic treatment. 4. During a mercurial treatment the study of the pathology of syphilis is impossible. 5. Mercury employed in hospitals for syphilis favors the development of scorbutus and gangrene, and is injurious to such patients by its vapors.

Comment on such remarks is certainly unnecessary. It is an interesting question to know what kind of experience and line of thought led a man to such desultory and incoherent views; still, they are on a par with those recently put forth by Hermann, of Vienna, who has long been known as a rabid antimercurialist. The present paper ("Sur la Nature des Affections Syphilitique et le Traitement mercuriel," *Gazette des Hôpitaux*, Jan., 1875), which as a model of incoherence is inimitable, was, strange to say, read before the Academy of Sciences of France, to which body the author addressed it. Hermann states that he founds his doctrine, as he calls it, on twenty thousand cases of cure, and he claims that in his hospital the percentage of relapse and death is much smaller than in the general hospital of Vienna where mercury is used. The present paper should be judged not only by its own claims, but also by reference to a work of large size published by the author a few years ago, "Ueber die Wirkung des Quecksilbers auf den Menschlichen Organismus," in which certainly there are more instances of highly

questionable diagnosis and false argumentation, than in any other of equal size with which we are familiar. Hermann's conclusions are: Syphilis should be considered as a local disease having consecutive forms, which bear intimate relations with the original lesions. 2. Mercury should be banished from treatment. 3. Consider the so-called constitutional lesions as the effect of mercury. The falsity of the last conclusion is well shown by a perusal of the paper of Keyes and Van Buren already alluded to, and is made manifest very often in practice, in which cases of tertiary syphilitic lesion present to us without previous treatment owing to various causes. The same objection may be urged against Hermann which applies to almost all writers of his faith, namely, that they are blatant with dogmatic and questionable statements, and that they present no solid facts. This criticism is certainly applicable to a paper by J. R. Beck ("On the Use of Iodide of Potassium in Syphilis," *Phil. Med. Times*, March 13, 1875), which is really a dogmatic assertion that mercury merely masks syphilis, causing its manifestations to appear later on in a malignant form, and of course doing infinite harm. If such a statement was based on any facts, or upon careful reasoning, it should receive attention, but when it stands alone, and is used somewhat as a taunt to those who believe in the efficacy of mercury, it carries with it no weight. The author offers two cases of late syphilis in which iodide was very beneficial as food for contemplation for mercurialists, whose only comment will be that they are surprised that the author thought them at all unusual.

In the same vein Watson read a paper "On the Uselessness of Mercury in Syphilis (*London Med. Record*, Dec., 1874) before the Medico-Chirurgical Society of Edinburgh. This paper is more temperate in tone than many others, still it lacks reason and facts; its gist is simply that the author does not think mercury useful and necessary except in some cases. We find again that time-worn statement, that the drug causes tertiary lesions, which is the key-note of the faith of all antimercurialists. Watson also urges the fact that without mercury syphilitic lesions will disappear, and then considers this a valid reason why it is useless. He fails to tell us—perhaps he does not know—of the calamities which often happen to those who are thus treated. Indeed he does not consider the fact that such a statement is far too sweeping, as it is *only some* of the lesions which are so ephemeral in character, and if his experience is in any way extended he ought and must have met with cases which would not get well without mercury. It is certainly to be sincerely hoped that before any more antimercurial articles are written that some new, undoubted facts will be observed, as such now are merely repetitions of statements which will not bear a crucial test. Hardaway writes a very temperate paper on the non-mercurial treatment of syphilis (*St. Louis Clinical Record*, May, 1875). He endorses the view of Diday and some others, that syphilis is in general mild, though in some cases its course is severe, hence that there is a mild and a severe form. Like Diday, H. regards the use of mercury as unnecessary in the mild form, which he thinks should be treated by tonics, on general hygienic principles. In severe cases he relies upon the agent, but he thinks that its long-continued use will produce disastrous effects. In support of the treatment of syphilis by the tonic plan H. cites two cases thus managed and cured, which respectively, in five and two years, have presented no relapses. At first thought these might appear as carrying great weight against the use of mercury, yet such conclusions must be accepted with great caution, as sufficient time has not yet elapsed, nor are the cases sufficiently numerous upon which to form opinions. It is certainly true that in some cases, owing to some peculiarity of the system, which is only affected by syphilis in a very mild and ephemeral manner, and for a tonic treatment, and even with no treatment, the normal standard of health will be regained; but such cases are exceptional, and the opinion of the really sound and scientific observers of large reading and experience is emphatic in favor of the absolute necessity for the administration of mercury in the early stages of syphilis, in order to prevent ulterior trouble. Hardaway's paper is a very creditable one, and stands in marked contrast with the other ones of extreme statement which we have considered.

In conclusion, gentlemen, let me thank you kindly for the honor conferred upon me in selecting me as the person who should prepare for you the report of progress made in this interesting and important field.

Reports of Hospitals.

BELLEVUE HOSPITAL.

Reports of Practice and Peculiarities of Treatment.

Pott's Disease of the Spine—Treatment by Means of the Plaster of-Paris Jacket.

This method of treatment, just now, is very promising. It is simple, is within the reach of every surgeon, and thus far the results attained have been eminently satisfactory.

The jacket is applied in the following manner: Have the patient put on a light wrapper, and then, by means of a pulley attached to straps which pass through the axillæ and secured to a cross bar over the head, suspend him completely, or as nearly so as possible. In this way the weight of the body is made to act as a counter-extending force, and removes all pressure from the diseased surfaces of the bones. Now, while suspended, draw the wrapper down smoothly over the trunk and hips, and then with a roller-bandage filled with plaster begin two or three inches below the crests of the illii, sufficient to secure a firm hold upon the pelvis; first making two or three extra turns of the roller at this point, and then embrace the body by successive turns until the entire trunk is encased to the armpits. If the disease is high up in the dorsal region, the bandage can be carried over each shoulder like a pair of suspenders. It is proper to place a roll of cotton upon each side of the spinal column opposite the seat of the disease, and the bandages may be reinforced by strips of tin made rough like a grater to prevent them from sliding, if the size of the patient or other conditions seem to demand it. Two or three rollers are usually sufficient to make a substantial jacket, particularly if they are supported by the tin strips. There is one point with reference to padding the trunk with cotton or other yielding material before applying the roller, and that is, do not pad any more than is absolutely necessary, for in so doing the irregularities of the surface are almost entirely obliterated, which is just the thing to be avoided. It is the gentle moulding of this jacket to the depressions and elevations upon the surface of the body that enables it to accomplish its work and be worn without complaint. Whereas if the trunk is padded with cotton to any great extent, the jacket

cannot get sufficient hold to keep the pressure off the diseased surfaces, consequently is thrown one side as inefficient. The straightening out of the patient, so to speak, can be done in any manner the ingenuity of the surgeon may devise. If the patient is a child, for instance, this can be easily accomplished by placing him across the lap of an assistant, who shall separate his thighs until all the extension is made which is necessary. Now, it will be suggested, can respiration be carried on properly while the trunk is encased in such a fixed jacket? Experience so far has proven that nature will take care of that. Indeed, it seems as though a very great benefit is to be derived by keeping the ribs quiet, for they are thus prevented from producing constant rubbing *at or near the seat of the disease in the spinal column.*

Again, suppose abscesses are present, how are they to be managed? Simply make a window in the splint, and then the discharge is placed at the command of the surgeon as well as though no jacket were present.

Suppose the patient complains of the jacket, that it hurts him, that it does not give him ease from pain, etc.? Remove it at once; find out where the difficulty is, and remedy it while applying another, for it may be said with a very great amount of certainty, that the fault is with the surgeon and not with the plan of treatment.

Now, all these points were illustrated in a bright little girl before us, æt. 12 years, who had been wearing one of the best constructed braces that American or foreign ingenuity has produced, but which failed to afford the relief desired. Since the plaster-of-Paris jacket has been applied, she can ride in the cars and walk with perfect ease and comfort, and has gained several pounds in weight.

HYDROPS-PERITONEUM.

Two or three points were illustrated by this case, the history of which is as follows: A female, æt. 40, with unimportant family history, and accustomed to the use of alcoholics taken upon an empty stomach, was admitted to the hospital October 7th, 1875. She had several attacks of epistaxis, and passed some blood by stool five weeks previous to admission. One week after she noticed that her feet were swollen, particularly at night. The œdema extended upward, and at about the same time she first noticed some enlargement of the abdomen. At our visit the abdomen was very large, and the accumulation of fluid had become burdensome. The case was therefore one which illustrated a large accumulation of fluid in the abdominal cavity with more than usual rapidity, never having before suffered from ascites.

The case illustrated another point, namely, that œdema of the lower extremities precedes the notice of abdominal enlargement, which was regarded as in keeping with the general rule.

Early tapping, followed by a tonic plan of treatment, was advocated for this class of cases, and was at once introduced. Repeat the paracentesis as often as the accumulation recurs. In this case the probable cause of the ascites was cirrhosis of the liver.

EPITHELIOMA—TERCHLORIDE OF ANTIMONY.

The growth had been developed upon a cicatrix following a burn, and it was hoped that the cell action could be so modified by the application of the terchloride of anatomy as would avoid an operation. It was situated upon the anterior aspect of the forearm, near the wrist, and was a little more than an inch in diameter. The surface of the growth was touched with the caustic, exercising due care that the surrounding tissues escaped, and it was to be repeated every six or seven days. The case progressed favorably.

CHRONIC HEART DISEASE.

The points of interest in this case relate to situation of the apex beat and the innocuousness of valvular lesions. A male patient, æt. 28, had had repeated attacks of articular rheumatism some years ago, and had since been told by his physicians that he had heart disease. He had not, however, experienced any trouble which he could refer directly to the heart. Upon physical examination the apex was found beating distinctly in the *fourth* intercostal space, and that while the patient was standing. There was no enlargement of the spleen or pericarditis with effusion, or increased area of cardiac dulness, or other condition which would account for this exceptional situation of the apex beat. Auscultation revealed a mitral regurgitant murmur of moderate intensity, and a very slight aortic regurgitant murmur. It was thought altogether probable that these lesions had been present for many years, and that they were doubtless the result of rheumatic endocarditis. Especial attention was drawn to this fact, namely, that we do not, as a rule, have evils resulting from valvular lesions of the heart until they have allowed of more or less enlargement of the organ, and that the graver difficulties, such as dropsy, dyspnœa, etc., do not, as a rule, occur until the heart has become dilated. Such murmurs, therefore, under circumstances like the present, relate chiefly to the future of the patient. They may at some remote period give rise to trouble, but they may be carried for years without becoming of especial importance, unless an intercurrent attack of endocarditis is developed. This point was regarded as specially important in connection with prognosis, and the idea that a grave prognosis must be made simply because a valvular murmur is present, should be cast aside, for the *intensity* of the murmur gives no reliable information with regard to the extent of the lesion.

PLEURISY WITH EFFUSION.

The point of special interest in this case relates to treatment, and it was made more interesting from the fact that a plan had been marked out upon theoretical grounds, by a group of students, which consisted of diuretics, perhaps hydragogue cathartics, and counter-irritants. None of these measures, however, were resorted to for the removal of the fluid, but under the influence of a full *tonic* course, with *good diet* the fluid in the pleural cavity was rapidly disappearing and the strength of the patient was increasing. Only a single small blister had been applied.

TYPHOID FEVER.

It was remarked by the visiting physician, that this fever is the only disease, except a double quotidian intermittent, which gives two full thermometrical curves within twenty-four hours; that is, two full intermissions and two exacerbations. This will, if true, account, in a certain number of cases at least, for the high temperature met with in typhoid fever in the morning, and is also a good aid in making a positive diagnosis.

FRACTURED CLAVICLE.

The bone in this case was fractured by *direct* violence, having been placed in forcible apposition with the hoof of a horse. One point with regard to treat-

ment was noted, and that was, that any dressing to be efficient must hold the *scapula* in a fixed position.

FRACTURE OF THE PATELLA.

A few points of interest were noted in connection with a case belonging to this class. A man, æt. fifty-five years, had slipped and fallen upon the pavement in such a manner as to strike squarely upon his knee, and the result was a transverse fracture of the patella. In this history there were two points, namely, a fracture of the patella by direct violence, which has been said never to occur; and a *transverse* fracture as the result of that direct violence, which has been said to occur *only* from muscular violence. The case illustrated another point, namely, that the separation of the fragments is not always, perhaps not in a majority of cases, due to the action of the quadriceps femoris muscle, but to a distention of the joint by the effusions incident to an acute synovitis. This introduces an item with regard to treatment, and that is, apply cold, and *always wait* until the swelling and inflammation have subsided before applying any permanent dressing. The condition of the knee suggested another thought, namely, that when there is serious joint complication in cases of fracture of the patella, a portion of the cartilage covering the *inner condyle of the femur* is usually chipped off. The same case presented another interesting feature; namely, a fracture of the patella had occurred upon the opposite leg five years ago, which was doubtless the result of muscular violence, for while carrying a heavy weight he slipped, and in the attempt to save himself an extra strain was brought upon that leg, the bone gave way, and he fell to the ground. The union in that instance had been exceedingly good, and perhaps bony.

Progress of Medical Science.

SECTION OF THE LATISSIMUS DORSI FOR ROTARY LATERAL CURVATURE.—Prof. Lewis A. Sayre recently delivered a clinical lecture on the above subject, and, at its close, performed a very interesting and novel operation. He explained his use of the adjective *rotary*, applied to lateral curvature of the spine, as denoting the fact that a rotation of the vertebræ took place prior to the development of the lateral deformity. It was very important in treating this form of curvature to ascertain whether its original seat was in the lumbar or in the dorsal region. It was in the curvatures commencing in the latter region that the primary rotation was most marked. The lateral curvature that begins in the lumbar region was due, usually, to an inequality of the two lower extremities, causing the plane of the pelvis to be inclined to one side. Such a deformity, if treated in its inception—before the development of structural changes—could be remedied by simply wearing a thicker sole on the foot of the shortened limb and by appropriate gymnastic exercise. The mode in which the dorsal curvature begins was a little more complicated. In this case the origin of the deformity was ascribed to a preponderating action of the serratus magnus muscle of one side over that of the other. The unequal action might arise from a habit of carrying one shoulder backward more than the other, or of carrying one hand behind the back, thus drawing the scapula backward toward the spine, by which the great serratus muscle, which arises from the base of the scapula, is rendered tense, with full power to act on the ribs. The latter rest with their angles against the transverse processes of the vertebræ, and their heads upon the bodies of the vertebræ; thus, when the serratus magnus of one side is contracted, a powerful leverage is exerted upon the spine, which causes a rotation upon itself. "This rotation produces tension of the latissimus dorsi upon the opposite side, and keeping up a constant irritation, stimulates it to undue contraction, which bends the body to that side, thus producing the lateral curve." The curve having been once established, the superincumbent weight of the body constantly tends to increase it.

It was observed that in "the very early stages of this deformity the distortion can be rectified by instructing the patient to use his muscles so as to cause their development in exactly the opposite direction to that which has produced the deformity." Various devices were mentioned by which this end might be accomplished—such as, balancing a book upon the top of the head while the patient walks about the room; gymnastic exercises; sitting while at study upon an uneven seat or triangular chair, so that there will be danger of falling over unless the body is properly poised; a spiral corset which has a constant tendency to untelescope itself and thus keep the patient straight, and the like. Such methods of treatment, it was observed, apply only to those cases in which permanent structural changes have not yet taken place.

At the conclusion of the lecture a case of lateral curvature in a man was presented, in which the latissimus dorsi had become contractured. On stretching the man out by means of a sling passing under the arms and secured around the chin and occiput, the apparatus being suspended from above and worked by a cord and pulley, the muscle was brought out prominently into view and was evidently the means of preventing the body from straightening itself. When the muscle was pinched spasmodic contractions of nearly all the muscles of the body were produced. It was claimed that attempts to stretch this muscle would only serve to irritate it and aggravate the condition. The professor therefore proceeded to divide the muscle subcutaneously; an operation, as he stated, never before intentionally performed for the relief of this deformity. The immediate effect was entirely satisfactory. "The patient was straightened almost upon the instant, so far as the lateral curvature was concerned, the angle of the ribs upon the opposite side being about the only deformity left." The pain of the operation is stated to have been only trifling; and immediately after, having been removed from the gallows, the patient expressed himself as feeling perfectly comfortable. Having been placed in bed a broad band was passed around the upper portion of the trunk and was secured by an india-rubber strap to the fixtures upon one side of the bed, and another around the pelvis secured in the same way upon the opposite side. Between these two elastic forces the body was retained in a perfectly straight position.—*The Medical and Surgical Reporter*, Oct. 23, 1875.

BATTEY'S OPERATION.—Dr. Battey, of Georgia, has a number of times performed ablation of one or both ovaries, with the avowed object of artificially inducing the menopause for the relief of a "diseased or pernicious ovulation." In all, he has operated ten times; in two instances the result was fatal, and in eight successful. Only such cases were deemed suitable for the operation as were otherwise incurable. The conditions for which the operation was performed in the

different cases have varied considerably. Thus in one case the patient had amenorrhœa, convulsions, recurring hematocele, repeated pelvic abscesses, incipient tuberculosis from pulmonary congestions, etc. Several were cases of ovarian neuralgia; in some there was intractable dysmenorrhœa, with pelvic deposits of old lymph; one had ovarian insanity, etc. We are assured that in no case has he operated where any other method of treatment offered any prospect of a cure.

Dr. Battey's views with regard to this operation are given somewhat at length in the form of an "interview" between the author of the operation and Drs. Yandell and McClellan, in the October number of the *American Practitioner*. In answer to a question in reference to his method of operating, Dr. Battey replied as follows:

"I place the patient upon the left side, semi-prone, retract the perinæum with an old-fashioned Sims' duckbill, having a broad but rather short blade, that is but little cupped, which I find very desirable. The cervix uteri is now seized with a stout volsella and drawn down under the pubic arch. The incision is made in the median line of the posterior vaginal *cul-de-sac* with scissors, and from an inch and a quarter to an inch and a half in length, the latter preferable. The incision extends at first down to the perinæum, when, if there be no bleeding, the serous membrane is opened. The speculum is now removed and the index finger passed into Douglas's fossa, to hook down one of the ovaries and bring it into the vagina, while an assistant, by pressing the hand upon the hypogastrium, depresses the viscera in the pelvis. Occasionally there is advantage in turning the patient supine, that the viscera may gravitate into the pelvis. Often the use of a suitably constructed forceps is required to assist in bringing down the ovary. A temporary ligature is cast around the base of the ovary, and the other organ similarly treated, when they are removed by écrasement, about ten minutes being consumed in crushing the pedicle of each ovary, the temporary ligatures coming away with the ovaries. No suture is used in the vaginal wound, nor is any tent or drainage-tube employed, as a rule. In several of my cases the ovaries have been found to be bound down by old peritoneal adhesions, which required to be broken up by the finger, and in one case the ovary was literally dug out with the finger-nail."

In response to questions regarding the effect of the operation upon the menstrual function, "sexual desire," etc., Battey replied that he had never seen anything like proper menstruation after it; that the sexual desire, so far as he could ascertain, remained unaffected; that, aside from remaining barren, which all of the patients indeed hopelessly were before the operation, nothing whatever was lost, and there was no evidence that the patients had been unsexed by it. The term "spaying," which had been applied to the operation by Dr. Matthews Duncan in an address before the British Medical Association, was repudiated.

Typhoid Fever caused by Intermittent Water Supply.—Dr. Carpenter gives an account of an epidemic of typhoid fever which visited Croydon in 1865, and was then due to improper ventilation as regarded the sewers, all the gas from them discharging directly into the houses, and contaminating the water supply. Energetic means were taken subsequently to remove the cause, and typhoid as an epidemic entirely ceased. It occasionally happened, however, that sudden developments of severe illnesses took place in single houses or blocks of houses; every inmate suffering more or less. The situation of these anomalous attacks was found to be in the higher parts of the district, where every sanitary requirement had been complied with. After a time it was noted that those cases in which whole households were affected occurred soon after the district had been placed under an intermittent water supply in consequence of the demand for water being greater than the supply. Another point was noted, that the water obtained from these houses contained sewage matters sufficient to account for the illness of the inmates. The supply-pipes which run from the mains into the houses are often carried through made ground, or through a subsoil soaked with sewage matters. The service pipes become rapidly corroded, and pin-hole pipes are the result, letting out water under pressure, and when the pressure is removed there is intermission of supply, and nasty water is drawn into the pipe. In February last there were three cases of typhoid in the district, two of which were imported. At this juncture there was an intermittent water supply lasting several days. Five weeks after the intermission an epidemic commenced, and by April 30th four hundred cases of fever were reported. A second epidemic occurred on the 16th of September from an intermittent water supply, this epidemic also coming to a climax in five weeks. Dr. Carpenter also mentions the following important fact: In a certain street the houses are supplied from two different sources; those on one side by the Croydon Waterworks; those on the other by the Lambeth Company. The sewer is in the middle of the road, and is common to both. The fever only affected those who were supplied with water from the Croydon Waterworks. — *British Medical Journal*, November, 1875.

Redressement Brusque of Genu Valgum.—At a meeting of the "Société de Chirurgie," held on Nov. 17th, M. Tillaux presented a young man, aged 16, in whom he had performed this operation in June, 1874. The operation differed somewhat from that described by M. Delore, of Lyons. The thigh was made to rest on its inner surface on a table, so that the knee just reached the edge. The surgeon then seized the leg, and using it as a lever forcibly straightened the limb. It was necessary to break the knee, the epiphysis of the femur being separated. Both knees were operated on successively, immovable apparatuses were at once applied and kept on for two months, and at present the young man's limbs are quite straight. In the discussion that followed M. le Fort said that the deformity depends on a malformation of the anterior part of the articulation, the anterior portion of the inner condyle being too strongly developed. The genu valgum is at its maximum when the leg is extended, but disappears when the knee is partly flexed.—*Mouvement Médical*, Dec. 4, 1875.

Ligature of the Femoral Artery with Antiseptic Catgut.—Mr. Nankivell mentions five cases illustrative of the results of this treatment. In no one of these patients was there the slightest sign of secondary hemorrhage, nor was any portion of the ligature seen in the dressings.

The wound, in two cases, healed in 21 days; the others in 31, 40 and 54 days respectively. He says that it is difficult to compare the period of cure in cases treated by catgut, on the one hand, and silk ligatures on the other, from the fact of the melting away of the ligature in one instance, and the separating of the thread in the other. He does not think the presence of the catgut prevents primary adhesion of the deeper parts of the incision.—*Lancet*, December 11, 1875

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, January 22, 1876.

HOSPITAL CONSTRUCTION AND ORGANIZATION.*

I.

"Hospital Construction and Organization" is the title of the book recently published by William Wood & Co. for the trustees of Johns Hopkins Hospital, Baltimore. It is the first installment of a precious succession of blessings which we believe awaits the American people in the execution of that grand inception of which a university is the centre, and this hospital is one of the earliest and most prominent outposts.

The trustees show, even in the advertisement, that they have measured the scope of this great endowment. The letter to the authors, by its greater detail, exhibits an enlightened apprehension of the various problems that are to be solved in the carrying out of the plan. The munificent donor evidently knew his men, and, while indicating the outlines of his design, wisely left expansion and details to the "discretion," "good judgment and experience in life" of those whom he felt assured would rightly estimate and operate this wondrous charity. They, first of all, resort to the method best adapted to elicit information for their own guidance, and also give it to the public that it may reap the advantage of the opinions the book expresses. We are glad to know that the authors of these essays invite a free discussion. It has evidently been their honest and modest intent to collect the best information within their reach, and to speak advisingly rather than authoritatively.

The investigation of the subjects presented in the letter addressed by the trustees to the authors involves the entire preparation, machinery and management of all classes of philanthropies. A hospital has been called "Hôtel Dieu," or hotel of God, for it is well recognized as a typical application of that charity which is not a mere humanity, but a response to the divine which is within and about us.

When, for instance, we solve the question as to the best house construction for the in-dwelling of the sick, we are compelled in the investigation to traverse those very problems which have to do with the best conditions of private houses.

The care of the sick is in many respects but an advanced study of the perfections of household administration. As, too, there are more sick people by tens of thousands in private houses than there ever can be in public charities, salient questions as to the management of all these are involved in every appreciative discussion of a hospital and its affairs. Physicians here learn most important lessons to be carried to the bed-side in every home. Nurses are here trained in the details of that attention which all sick ones require. There is a beautiful symmetry in the will of the donor in that he specifies, in connection with the hospital, a training-school for nurses, and singles out the medical college for chief prominence in its common relation to the hospital and the prospective university. While every educational interest will greet the rising Göttingen, every medical man must rejoice with the sparkling joy of true science, that now there is prospect of opening to medical education an arena such as neither the continent nor the century have before enjoyed. We wonder not that one of our authors, himself a medical professor, breaks forth in honest utterance (pp. 317–318) against most medical colleges as private educating and licensing stock corporations. He speaks of our whole system as "vicious," and glows with enthusiasm as he declares that "in the munificence of Mr. Hopkins we have the prophecy and possibility of a reform in education, which will be general in its character and permanent in its results." We recently heard an eminent Baltimore medical professor say that he was willing to see this noble plan executed, although it should submerge his own institution.

The language of the donor justifies prolific expectations beyond the hospital itself. He says to the trustees: "You will bear in mind that it is my wish and purpose that the institution shall ultimately form a part of the medical school of the University." He visioned beyond the benefit to those in the hospital, knowing that all are dependent upon the skill of the physician, and that the right application of hygienic principles here will outreach gifts by the handful into all the homes of society. In his directions as to a training-school for nurses, he puts this still further in words, "because," says he, "it will secure the services of women competent to care for the sick in the hospital wards, and will enable you to benefit the whole community by supplying *it* with a class of trained and experienced nurses."

We enter, therefore, upon the examination of this

* HOSPITAL PLANS. *Five Essays Relating to the Construction, Organization, and Management of Hospitals.* Contributed by their Authors for the Johns Hopkins Hospital, of Baltimore. New York: William Wood & Co. 1875. 8vo, pp. 358.

book not merely as we would discuss a constricted local charity, but because it involves the whole question of habitations, and bears largely on the interests of all society. The limits of a journal only permit us to indicate the more essential points and to hint at additions, without the opportunity of extended enforcement.

The authors who here present their views may well be regarded as representative men of their profession, and as such closely allied to the subjects they discuss. The cities of New Orleans, Washington, Baltimore, Philadelphia, New York, and Boston are represented by them. Five of them are physicians of prominence, and one of them is an architect, who by his two appendices has well entitled himself to be reckoned as furnishing a plan. Some of the writers have been familiar with both civil and military life, and two, at least, have evidently availed themselves of minute professional aid from architects and engineers. While the papers are of quite unequal merit, we should be sorry to spare any one of them from the compilation. If in review we seem fuller in the criticism of possible shortcomings than in bringing out the merits of these essays, it is only because such method best answers the practical results which trustees, authors, and voluntary contributors alike desire.

The site chosen is first in order before the precise location of buildings is discussed. This, fortunately, is already determined, so far as the hospital is concerned, in such a way as seems eminently satisfactory to all the essayists. Fourteen acres of high elevation, bounded on three sides by streets grading therefrom, with good surface drainage and a fall for under-drainage toward tide-water, certainly presents an attractive landscape, over which the eye of the delineator may range with delight. It is a beautiful plot, already in the city, and destined to be more so, and presents many natural advantages of position and space. The charm of this has been so great that but one or two of our authors seem to give to drainage the importance which the subject demands. One gives it but a passing line; another alludes to it only as to the carriage of surface water; a third and a fourth, while announcing the subject, speak almost entirely of sewerage, under the head of drainage, as if the two were identical. In paper five we are glad to find more detailed attention to its importance.

While we do not believe in the impurity of ground so strongly as there presented, yet the remark (p. 271) is most important, that "there should be a thorough examination as to the existence and depth of the stratum of water-bearing soil and the fluctuations of the ground-water." The retentivity of different soils and their varied needs of attention, is not always the same on all parts of the same plot, and the ground substructure should be well mapped and described before occupancy. When the facts are determined we also claim that "a system of deep drainage should be perfected, which should effectually prevent ground-water from approaching within six feet of the surface." We must never forget that character of sub-soil, rather than elevation, determines many questions of drainage.

Besides, although natural drainage may be good, and the underlying strata pervious enough for dryness in the natural state, such buildings as are here to be spread abroad suspend very many of the laws of telluric and celestial correspondence.

Erections upon and over ground disturb its temperature, moisture, evaporation, its electric condition, etc., so much that compensation is required.

The underground plan of the engineer is as fundamental as the uprising structure of the architect. Art above ground must be conservative toward the ills with which she covers the earth, unless somehow she intervenes to make the curse a blessing. This she can do, but it must be done beforehand, in order to comprehend and control the situation. We have sometimes even to complain that engineers understand levels and the arithmetic of descent better than they do the play of physical forces, and seem to think all their science consists in right fall and curve, and calibre of tubes. As the doctor must needs consult the architect, so must the engineer the physicist. We do not dwell upon gravelled walks and grass lawns and arrangement of trees, because all preparation of grounds below and on the surface should be in subjection to the law to preserve or secure the best natural conditions of building ground, and to provide compensation by extra drying facilities for those necessary or ornamental interpositions which art introduces, whether in buildings or surroundings.

While we believe in the ventilation of the earth, we are a little suspicious of heated ventilating shafts "communicating at the base with drain-pipes and conduits," unless great care is taken that they do not raise unduly the temperature of organic matter by over-heat and irregular action.

THE PROBING OF CAVITIES AFTER GUN-SHOT WOUNDS.

The importance of a thorough study of the principles of medical jurisprudence is becoming more and more apparent when we take into account the efforts of the lawyers to transfer the responsibility of death in certain murder cases to the surgeons in attendance upon them. The plea of moral insanity has been worn so threadbare, that more than ordinary pains are required to convince a jury of its truth. This does not, however, seem to be the case with what is now termed in the courts scientific murder, either by neglect or unwarrantable interference on the part of the surgeon. The first notable instance in which this plea was advanced was in the Stokes trial. It was assumed by the defence that probing of the wound in the abdomen and an overdose of morphine were the responsible causes of death. Although neither of these assumptions were substantiated to the satisfaction of the jury,

enough of doubt was thrown upon the question at issue to result in a mild verdict.

In the case of Carruth, of Vineland, who was shot in the head by Landis, a similar line of defence has been taken, and some of the surgeons in charge of the case are made to appear in a very unenviable light before the public. There is an attempt to prove that the introduction of a probe in a direction contrary to the course of the ball into the brain, excited inflammation *per se*, and caused abscesses, of which the patient afterwards died. Again, the defence claims that the abscesses were not discharged as they should have been, and that the reasonable chance of a recovery was thus cut off. There are a great many matters of fact to come up in the consideration of such questions, and it is not to be wondered at that the experts in the case have different opinions.

In view of the autopsical appearances of the brain, it is hard to prove that the probe produced extra inflammation, but the possibility of such a state of affairs is seized upon as one of the desperate chances in criminal jurisprudence. No practical surgeon will attempt to defend the passage of a probe through sound brain-tissue. It is one of those mistakes which constantly occur as the result of eager officiousness in such cases. We know it is the fashion to find the ball and extract it, if possible on the spot, as if this were the main object of all treatment; but in cases of gunshot wounds of cavities we think it is time that the fashion be changed. In the great majority of instances of gunshot wounds of cavities the mischief is done when the ball enters, while the risks of internal hemorrhage and secondary inflammations of the viscera are sufficiently great to deter the surgeon from constantly thrusting in his probe; and even if the ball be found, as the result of blind poking through vital tissues, its extraction, under the most favorable circumstances, is rarely if ever unattended with positive danger. The moral of all this is, viewed at least from a medico-legal aspect, that the less we probe for balls hidden in cavities the better.

UNNECESSARY JOURNALS.

Enterprise in journalism is, on general principles, to be commended, but it is hardly requisite for every society or every school in North America to have its so-called "medical organ." Every little while we hear the announcement of a new periodical of this sort, generally accompanied with the usual modest misgiving on the part of the editors as to its ultimate success, but invariably with an earnest appeal for the support of friends. Many of these ventures are explained on the ground of a want long felt by a particular medical community, or a particular medical school, and it is only after a signal failure that the editors are willing to acknowledge that they have made a miscalculation. But this is a matter of business which every one who is likely to be interested in journalistic undertakings should thoughtfully consider. There is, however, another element in the question which should be taken into account. These new periodicals not only take a certain share of pecuniary support from those already established, but are the means of ultimately burying many valuable communications. Besides this, every unnecessary journal tends directly to interfere with the general progress of journalism. This fact is well presented, although perhaps not from an entirely unprejudiced standpoint, by the editor of the *Canada Lancet*, in allusion to a new journal (*The Canadian Journal of Medical Sciences*), which has appeared in Ontario. He says: "It is much to be regretted that the American idea of having a 'school organ' should have been transplanted to Canadian soil. There can be no other reason for the appearance of another medical journal, especially in these hard times. There is no surplus of literary material seeking publication. In fact, Canadian journals, so far, are obliged to fill their pages with extracts and reprints. Two journals in Ontario cannot both pay working expenses, and the result of this effort, even if partially successful, will be to weaken and jeopardize the existence of both, and bring Canadian medical journalism into bad repute. It will also have the effect, if partially successful, of retarding or preventing those improvements, not only in the quality and quantity of the matter provided for the readers, but also in those looking towards the issue of semi-monthly or weekly editions, a very great desideratum in these days of rapid improvement in medical and surgical science."

HOSPITAL ABUSES.

The injustice of operating in hospitals upon patients who can afford to pay is not altogether an American institution. In a recent number of the *British Medical Journal*, a correspondent calls attention to the abuse, presenting at the same time some very damaging facts against the upright intentions of many of the surgeons who hold hospital appointments in London. In the course of his letter he says:

"If the person cannot pay the regular fee of the hospital surgeon the system is to do it for nothing, rather than the provincial medical man shall do it for a fee that will quite remunerate him. Of late it has been getting so bad, that people tell country surgeons that, unless you do it on their terms, they will go to London and get it done for nothing. At this present time I have a patient, the aunt of a banker who moves in the best society, but has the impudence to tell me that, if a large fee be charged, she will go to a charitable institution. I could tell you of dozens of cases; in fact, it is getting most monstrous. Even to-day a man worth thousands is threatening similarly unless the operation is performed at his price," etc., etc.

We have so repeatedly given parallel examples to the above as occurring in our own city, that this will

be recognized as an old story. The evil is a great, a growing one; but under the present system of hospital management, the remedy, being so radically opposed to the interests of those who hold hospital and college positions, is hardly possible of immediate application. As all cannot hold these appointments, the obscurer practitioners must struggle on as best they can, and be satisfied with the few crumbs that accidentally come in their way. If they cannot be successful, they can at least be philosophical.

MEDICAL STUDENTS' RECEPTION.

In the present number we publish a full report of the reception of the medical students of this city by the Young Men's Christian Association. We take occasion again to heartily commend the spirit which prompted such a tender of Christian hospitality. The medical student is a hard-worked, and, generally speaking, a much neglected piece of humanity. In the intervals of hard study, when he is in need of relaxation, he is literally without any kind and sympathizing influences save those which centre around an attic room in a second-class boarding-house. That he is in need of friends, comfort and sympathy, every one who has left a good home to go to a strange city, fully appreciates. It is to supply these pressing wants that the Young Men's Christian Association has opened its doors for the winter to the medical students here, and may the example be followed by similar associations elsewhere.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, December 22, 1875.

DR. F. DELAFIELD, PRESIDENT, IN THE CHAIR.

ANEURISM OF AORTA.

DR. LOOMIS presented a specimen taken from a Scotch sailor, 33 years of age, who was admitted into Bellevue Hospital on the last day of November. He stated at the time of his admission that his father and his mother had died of phthisis. Farther than that his family history was good; that thirteen years before he had an attack of syphilis, for which he was treated with mercury and iodide of potassium, and that during these thirteen years he suffered from syphilitic manifestations, which yielded to specific treatment; that three years before he had received a blow on the left breast from a weight of three hundred pounds falling from a height, and striking with a slanting blow with sufficient force to knock him down, or, as he said, "knocked his breath out of his body for fifteen minutes." It seems that he had been unconscious for a few moments after the blow.

For the last twenty years he had performed the duties of a fireman on board of a steamer, had been a hard drinker until within two or three years, when he drank moderately.

In February last he, for the first time in his life, had a cough. It came on after exposure, and he thought that it was due to a cold. This cough was attended at times with expectoration of a glairy mucus, and at times with a muco-purulent material, and was not paroxysmal in character. He remained pretty well from last July until six weeks before admission into the hospital, when he began to cough again and to expectorate as before. Three weeks after the second commencement of the cough he spat about a tablespoonful of blood. The blood was bright-colored, and was not mixed with the sputum. After that, up to the time of his admission, he spat up streaks of blood in his expectorations, and sometimes the blood would come up clear and bright red as before.

He said that from the time he had received the blow he had pain in his left chest, which was especially marked after exercise. He would locate it at one time in the epigastrium, and at another time in the left nipple. During the six weeks previous to admission it had increased and extended into the left scapula, was of a constant and heavy character, and at times was sharp and lancinating. After the third week of the cough he began to suffer from shortness of breath, and after exertion would sometimes be compelled to lie down. There was at no time, as far as he could remember, any change in his voice, any peculiarity in the cough. He had intermittent fever at different times during the last twenty years.

At the time of his admission into the hospital he had a temperature of 102° F., pulse 109, and respiration 29. He got short of breath on slight exertion; he had a cough bronchial in character, accompanied by a muco-purulent expectoration streaked with blood, at times spitting up a mouthful of clear blood.

Within twenty-four hours after his admission his temperature was normal, and his paroxysm of fever, which was present at the time of his admission, ended in a profuse perspiration. During his stay in the hospital he had repeated attacks of fever, followed by sweating, when his temperature would return to its normal standard.

He was well nourished, had a good muscular development, a rather anxious expression of countenance, and preferred to lie partially on his left side and partially upon his back, with his head elevated. He had noticed, within the last few days before his admission, that there was some difficulty in swallowing. Before the food reached the stomach there was a painful sensation experienced. Inspection showed absence of motion on the left side, and exaggerated motion on the right side. Standing behind the patient, and casting the eye over the anterior portion of the left chest, a slight undulating motion or vibration could be noticed. It was very slight, and more apparent when a piece of white paper was laid over the infra-clavicular space of the left side. The heart was beating in the normal position with normal force. On palpation there was an entire absence of vocal fremitus over the anterior portion of the left chest, but laying the hand over the left clavicle, there was a distinct vibration of voice. There was no bulging nor motion on full inspiration, or very little, and there was at no point any pulsation over the left chest. Dr. Loomis thought that, while grasping the chest with one hand on the posterior, and the other on the anterior aspect, an indistinct pulsation could be detected. On percussion there was complete flatness over the whole of the left chest, except at the infra-clavicular space, where there was merely dulness.

On auscultation there was an absence of vesicular

respiration over the anterior left chest, and exaggerated over the anterior right chest. There was bronchial respiration at the junction of the angles of the scapula, in the inter-scapular space, and broncho-vesicular breathing underneath the clavicle in front. The heart was normal in sound, with a slight increase in force of beat, and a little prolongation of first sound, but there was no murmur. On careful listening in the inter-scapular space, when the left scapular was well brought forward, Dr. L. detected a distinct systolic bruit, but it was not detected by any others who examined the patient, in fact was not heard at all save at one or two examinations. The diagnosis made at the time before the class was: pulmonary consolidation of the left lung, with pressure upon the left bronchus, which interfered with the entrance of air into the left lung, cutting off vocal fremitus and the respiratory sounds, and that that pressure was probably due to an aneurism given off from the descending portion of the aorta while passing forward. The reasons for this were that the heart was occupying its normal position, and any idea of the existence of subacute pleurisy which the physical signs might indicate had to be abandoned. The reason for believing that the aneurism pressed upon the left bronchus was the fact that the patient had spat blood a number of times in small quantities, that he had a bronchial cough, and that he had at times difficult deglutition. The prognosis was that he would probably die from sudden hemorrhage. From that time the case went on very well, the patient rather improving than otherwise. The quinine controlled his fever, and his appetite returned. The physical signs remained, except that they were less defined. The night before his death he felt so much better that he stated to the house-physician his intention of leaving the hospital. At seven o'clock the next morning he bled two quarts, and died immediately after.

On opening the thoracic cavity the right lung was found rather emphysematous in its distention, the lower portion being in the condition of pulmonary congestion and œdema. The left lung presented the appearance on its left surface of that slow form of pneumonia called catarrhal, with a good deal of fibrous increase. The pleura was thickened, and showed the evidences of inflammation. The heart was normal in size, and so far as the valves were concerned there seemed to be nothing that would lead them to be insufficient, or give rise to obstructive murmur. At the origin of the aorta there was an atheromatous degeneration, which extended more or less throughout its whole extent. At the point where the lower portion of the descending arch swings under the left bronchus there was a fusiform aneurismal pouch, at the depending portion of which was an opening large enough to admit the end of the index finger. This opening seemed to have taken place rather slowly, from the giving way of tissues around it. At the time of the autopsy the opening contained a well-organized clot, and one was found in the left bronchus. The recurrent laryngeal was not involved. The aneurism was about the size of a hen's egg.

Dr. O'Sullivan referred to the case of a Catholic clergyman under his care, in which, although aneurism was suspected, there was nothing to indicate its existence for three months save difficult deglutition and an occasional huskiness of the voice. Subsequent to this there was a slight dulness under the left clavicle.

Dr. Beverley Robinson remarked that dysphagia was quite a significant symptom in aneurism of the aorta, while the huskiness of the voice was explained by the existence of paralysis of one of the vocal cords, which condition from the start could be distinguished with the greatest readiness by the laryngoscope.

Dr. Loomis stated that laryngeal symptoms, in connection with thoracic aneurisms, had been recognized from the time aneurisms were known to exist; but in regard to the laryngeal element as an aid to diagnosis he had not much faith. Within the past two or three years he had seen three cases of aneurism in which the diagnosis could be made by physical examination, and which were being treated by a gentleman well skilled in laryngoscopy, for paralysis of the vocal cords.

Dr. Robinson replied that these cases might have been due to coincident congestion of the vocal cords, the significant point of diagnosis by the laryngoscope being that in aneurismal tumors these cords were simply paralyzed.

[*To be Continued.*]

Correspondence.

ARTIFICIAL RESPIRATION IN APOPLEXY.

To the Editor of The Medical Record.

Sir:—The following case may be of interest, as it supports the views of Corso, the advocate of artificial respiration in apoplexy:

On the 31st March, 1875, while travelling in the cars between Baltimore and Philadelphia, Col. B., of the Military Academy at Chester, was seized with apoplexy. I had him immediately removed to the parlor car, laid upon the floor, and his clothing loosened. By this time he was entirely unconscious, his breathing was slow, labored, stertorous, and puffing; faced flushed and turgid; pulse slow, hard, and intermitting; pupils of eyes slightly contracted, but no disparity was observed between them; surface of body warm; no convulsions nor paralysis.

Fearing death by *apnœa*—face becoming more livid, the coma more profound, and the respirations feeble and labored—I had recourse at once to artificial respiration (Sylvester's method), and in the space of an hour and a quarter had the satisfaction of seeing the Colonel return to consciousness, and by the time the train reached Chester, he was in a condition to be removed to his residence at that place. I have since heard from his physician that there has been no return of the attack, and that he is now in the enjoyment of good health. So profound was the coma and so grave the respiratory symptoms in this case, that I feel assured (in the absence of all other remedies) he must have expired but for the timely use of artificial respiration.

I have recently tried Sylvester's method in a case of uræmic apoplexy without success, but in two cases of angina pectoris in which it was used, it afforded considerable relief.

C. J. Cleborne, M.D.

FRACTURE OF CLAVICLE BY MUSCULAR ACTION.

To the Editor of The Medical Record.

Dear Sir: Considering the rarity of fractures of the clavicle by muscular action, I have thought it proper to offer a report of the following case for publication.

James M., about 21 years old, catcher of the Androscoggin Base Ball Club of this city, last summer, while

playing in his position behind the striker, received a blow on his chest from the ball. It did not cause him any lasting pain, nor interrupt his playing. In the next inning, when it came his turn to strike, he struck forcibly at the ball, missed it, felt a sharp pain, and "giving way" in his left shoulder, and his arm fell to his side. I saw him a few minutes later, and found the left clavicle fractured at the junction of the middle and outer thirds, and the fragments separated. The case was treated by Dr. J. A. Donovan and myself, and the patient made a good recovery. When we questioned him in regard to the blow from the ball, he could not tell even on what part of the chest it was received. Nor could we tell from examination. From the fact that he played some time after he was hit, without any inconvenience, and from other circumstances already given, it was our opinion the fracture was caused by muscular action alone.

EDWARD B. WESTON, M.D.

LEWISTON, MAINE, *Dec.* 20, 1875.

HEYWOOD SMITH'S SCISSORS.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—I have had recently put into my hand part of the number of your journal of Jan. 15th, 1874, and at pp. 45, 46, there is a description, with an engraving, of a pair of angular scissors, with double action, made to cut at any angle, by working on a hinge with a rotatory joint, and claimed to be introduced to the profession by Messrs. Tiemann & Co.

I beg to draw your attention to the fact that these scissors are my invention, and are fully described in *The Lancet* of April 27th, 1872.

I think it is but fair that when instrument-makers wish to put forward a new instrument they should give due credit to the inventor, even though he be not of their own country.

I remain, yours faithfully,

HEYWOOD SMITH, M.D.,

Physician to the Hospital for Women.

PORTUGAL STREET, LONDON, W., *Dec.* 3, 1875.

Medical Items and News.

NEW YORK ACADEMY OF MEDICINE.—At the recent meeting of this body, valuable donations to the library were announced. Notable among these were several volumes from Dr. J. T. Metcalf; 29 volumes, 110 miscellaneous medical journals, and 225 medical pamphlets from Dr. E. R. Peaslee; a magnificent donation from Dr. J. W. S. Gouley, consisting of the works of Hippocrates and Galen, in Greek and Latin, 13 volumes bound in 9 folios, and valued at 600 francs; an alphabetical index and catalogue of the first 73 volumes of the medical pamphlets in the library of the Academy, prepared and presented by Dr. Lawrence Johnson, and several volumes from Drs. E. D. Hudson, Jr., and J. W. Howe.

A bust of Dr. J. Kearney Rogers was accepted from Mr. Isaac F. Wood, and the thanks of the Academy tendered to the donor.

A portrait of Dr. John Watson was received from Mr. E. C. Watson, and a resolution of thanks adopted by the Academy.

The following resolution was reported from the Council and adopted by the Academy:

Resolved, That a committee of three be appointed whose duty it shall be to secure, if possible, the passage of a law that shall exempt the property of the Academy from taxation and seizure for debt.

The president appointed as such committee: Drs. Austin Flint, Sr., E. R. Peaslee, and J. O. Stone.

The president announced the death of Dr. John R. Van Kleek.

Dr. F. P. Foster then read a memorial, which was to have been read by Dr. Van Kleek upon the death of the late Dr. Isaac Wood.

After the reading of the memorial, Dr. A. C. Post reported the following resolutions upon the death of Dr. Van Kleek, and the president appointed Dr. James R. Wood as memorialist:

Resolved, That the Fellows of the Academy have heard with sincere regret the intelligence of the death of our old associate, John R. Van Kleek, M.D.

Resolved, That we cherish his memory as that of an honored and useful member of the medical profession.

Resolved, That we sympathize with the family in the great bereavement which they have sustained.

Resolved, That copies of the resolutions be sent to the family of the deceased and to the medical journals of this city.

A. C. POST, M.D.,
W. N. BLAKEMAN, M.D.,
J. G. ADAMS, M.D.

RECEPTION TO MEDICAL STUDENTS BY THE YOUNG MEN'S CHRISTIAN ASSOCIATION.—The Young Men's Christian Association gave a reception to the medical students attending the different colleges of this city, and extended to them the numerous privileges and advantages of the institution. A very large audience was present, composed chiefly of medical students and their lady friends. The programme was opened in the Hall by an organ selection, entitled "Thunder Storm," executed by Edward G. Jardine.

MR. WILLIAM E. DODGE, JR., the President of the Association, delivered the address of welcome, tendering the use of the hall, library, and gymnasium to the students attending medical lectures. In the course of his remarks he related some very interesting and telling anecdotes of professional life, and concluded by advising the students to cultivate a manly and Christian character. The address was followed by a song, "I dreamed that I dwelt in marble halls," rendered by Miss Benziger, after which the first speaker, Prof. FORDYCE BARKER, was introduced, and offered the following remarks:

MR. PRESIDENT:—On rising to perform the part assigned to me in the programme of the evening, it is my duty and my privilege to thank the Association, through you, for the kind and happy conception of this entertainment, which has been so beautifully carried out this evening. I thank you in behalf of the young gentlemen, your guests, who are present from every part of the United States and the British Dominion of North America, and who have come to this city on account of its great advantages for the study of our profession. I thank you, in behalf of their fathers and their mothers, their brothers, their sisters, and their sweethearts, that being strangers in a great city, you have held out the hand of friendly welcome to a social entertainment of music, song, and speech. I thank you, on the part of the faculties of the different medical colleges in the city, for your interest in and your hospitality to those who will hereafter represent in every part of the land the results of New York professional education.

As the magnificent organ performance, to which we have just had the pleasure of listening, recalls to my

mind the picturesque town of Freyburg, in Switzerland, with its striking view of the Alps and its suspension bridge, and also brings back to my mind's eye the beautiful Lake of Lucerne, its grand mountain scenery, with the Rhigi on the one side and Mt. Pilate on the other, and the wounded colossal lion of Thorwaldsen, an allegorical monument to the Swiss Guards of Louis XVI., because I heard this same piece played on the fine organs of Freyburg and Lucerne; so in after life a thunderstorm will recall to many a hard working doctor the reminiscence of the happy evening passed in this marble hall. I believe the hall is granite, but you will permit me to call it marble by courtesy for this evening only. The song which has just been so charmingly rendered will often be heard again by some of your guests in the households of the sunny South, the far West, and the frigid North, and will be sure to bring back the memory of earnest student life in New York, and the hospitable gathering in the Hall of the Young Men's Christian Association. I dare say that even to-morrow night more than one who is engaged in tracing out the muscles and the nerves, the veins and the arteries of the human body, will find himself unconsciously humming, "I dreamed that I dwelt in marble halls."

It is an ungracious act to criticise when everything has been arranged so well, but I must say to the students confidentially—I have often before talked to students confidentially—that it was a great mistake on the part of the committee of arrangements to put me in painful contrast with my friends and elegant (I meant to have said eloquent, but both terms are appropriate) confrères who are to follow, and who are noted for their gifts of oratory as well as for their rich, sonorous voices. Now, if I had only been set down for one of the songs, I am sure that I should have added much more to the entertainment.

Sidney Smith said that there would be many more Samaritans in the world were it not for the oil and the two-pence. The Young Men's Christian Association have proved themselves good Samaritans to the stranger students of medicine in this city, and have furnished the oil, or its equivalent gas, and the metaphorical two-pence. The pleasure they have given will remain a happy memory for after life. This programme will be taken home to many a household, and will be read with delight by many a fond father and loving mother. It sounds good, pure, and moral: "Reception to Medical Students by the Young Men's Christian Association of New York." The events of the evening will be rehearsed with glowing, grateful enthusiasm to the appreciative interested listeners of the home fireside.

And now having spoken my thanks in behalf of the medical students and of their friends and of the faculties of the medical colleges, will you, Mr. President, permit me to address a few words to your guests in behalf of the Association over which you preside.

Well then, gentlemen, students of medicine, I am authorized to express the hope of the Young Men's Christian Association that you may have the patience of Job, and a good many other patients, the piety of Abraham, the meekness of Moses, the strength of Samson, the valor of David, the wisdom and riches of Solomon, the zeal of Peter, the knowledge of Paul, and be like Luke a beloved physician, like him write a treatise, and after having lived to the age of Methusaleh, that you may, like Elijah, be taken up to heaven.

A violin solo by Carl Lanzer followed, after which

Prof. T. Gaillard Thomas, M.D., delivered another address, in the course of which he said, that in this broad land, teeming as it did with medical institutions, the number of physicians was necessarily rapidly increasing to meet the demands of an increasing population. Every one in this state of affairs admitted the urgent necessity of the maintenance of a good understanding between the medical guild and society at large. Then having given a brief history of the progress of medical science, he continued, by saying that in olden times, before society was so highly cultured as now, the medical student was looked upon as a rather wild, erratic, and dissipated individual, with an undue fondness for midnight raids upon neighboring church-yards. After a long course of social chastisements and reproofs, however, a change for the better had by slow degrees come over public sentiment, and had resulted in elevating the profession above the plane it occupied in former years. Although the character and social relations of the students had much improved, much yet remained to be done, and students themselves by their own efforts must elevate their profession and mutual interests.

After a pleasant song by Miss Benziger,

Prof. D. B. St. John Roosa, M.D., delivered an address, in the course of which he alluded to the great progress made in medical education during the past fifty years, claiming that New York was now entitled to the honor of being a university town, a medical centre for the United States. He concluded by saying that he interpreted the invitation extended to the students as a well-timed hint to them that it might be desirous for them not only to improve their morals, but their manners, which had become somewhat blunted by the professional experience of the lecture and dissecting rooms.

Chancellor Crosby, of the University, was called upon for a speech, but he begged to be excused, remarking that the statements he had recently made before the medical students had apparently so startled that body that he had not yet heard the last of them. After partaking of a collation the audience adjourned to the parlors, where they were further entertained by a musical programme.

Dancer's Cramp.—Dr. B. Schultz describes in a recent number of the *Wiener Med. Wochenschr.* a disease peculiar to solo dancers in the ballet, which has come under his observation in three cases, the most aggravated of which is described as follows: The patient complained of suffering very severe pains while dancing. Beginning in the soles of both feet the pains spread with increasing severity to the calves of the legs; they at last became so violent that her feeling of security was lost, the feet seeming as if made of wood. These pains were accompanied with violent palpitation; and, if she continued to dance, she felt faint and sometimes lost consciousness, the body becoming quite rigid. When the pain and palpitation were less intense, the pain continued after dancing, and ceased very gradually, leaving some tenderness of the soles; on attempting again to dance the suffering would recur again. Dr. Schultz found, from the examination of these cases, that the cause of the pain lay in the *pas* performed on the points of the feet, and is owing to exhaustion of the muscles which fix the metatarsus and phalanges of the great toe. The shoe worn by the dancer, without which the ballet step seems to be impossible, is made as follows: The dancing shoe is made rather wide; the sole is of soft leather, and shorter than the foot, reaching only as far as the posterior third of the ungual phalanx of the great toe. The upper part, generally of satin, projects forward, and supplies the place of the deficient leather of the

sole. This part of the satin is worked threads, so that it may not be torn. In the interior of the shoe, over the leather sole, is a layer of thin, firmly pressed pasteboard, either extending over the whole breadth of the anterior part, or limited to the length of the great toe. In the former case it is carried back, gradually narrowed as far as the heel. The leather sole and its covering are lined with find kid leather. The heel part of the shoe is quite soft, consisting only of satin; and the shoe is fastened above the ankle by narrow ribbons. Without this preparation the pointed step is impossible.

New York Pathological Society.—At the last annual meeting, held January 12, 1876, the following officers were elected for the ensuing year: President, C. K. Briddon; Vice-President, Dr. R. F. Weir; Secretary, Dr. George F. Shrady; Treasurer, Dr. John H. Hinton.

State Emigrant Asylum of Ward's Island.—Concerts are given to the patients of this institution every month by volunteer performers.

Small-Pox in Brooklyn.—The Brooklyn Board of Health have considered it necessary to divide the city into small-pox districts, over which a physician is to be placed, whose duty it is to arrest and prevent the spread of the disease by every means in his power. Dr. D. H. Cronin is chief of the staff.

Irregular Practice in Bavaria.—A ministerial order, dated July, 1873, provides that, before the 1st of March in each year, a tabular return shall be made of persons practising medicine without due authority in the kingdom of Bavaria. The table for the present year is published in a recent number of the *Aerztliches Intelligenz-Blatt*. It shows that there were, on January 1st, 1,156 illegal practitioners—911 men and 245 women—in the kingdom; and gives statistics as to the nationality, social condition, and calling of the various persons, and the department in which they practise. There are 106 homœopaths—99 males and 7 females; 39 bone-setters—28 males and 11 females; 15 rheumatism and gout doctors; 2 hydropaths; while 4 gave their special attention to skin-diseases, 2 to cancer, 2 to syphilis, 7 to hernia, 4 to whitlow, 1 to toothache, etc., and in the list are 396 *chirurgen*, barber-surgeons and dentists, and 40 apothecaries. Medicine in general is practised by 464; internal medicine by 112; and surgery by 50.

Vaccination in St. Petersburg.—In the Foundling Hospital at St. Petersburg, where most of the public vaccination is carried on, calf lymph has been used side by side with human lymph for five or six years past. It is found to be equally protective, and failures in primary operations have, by care and perseverance, been reduced as low as two per cent.

A New Weekly.—*The Louisville Medical News*, a weekly journal of medicine and surgery, is edited by Richard O. Cowling, A.M., M.D., Professor of Surgical Pathology and Operative Surgery in the University of Louisville, Ky., and William H. Galt, M.D. Terms, $2.10 per annum in advance, postage paid.

A Spiritual Physician recently gave the following opinion, based on the examination of a lock of the patient's hair: "There is a bilious torpid state of the liver, an over-secretion of gall fluid. This mingles with the bile and leaks into the stomach, upon which is fever-coating. This retards digestion and agitates the nervous system. Too much internal slow fever habit, obstructions at the kidneys, sediment in the bladder."

Another Giant.—The *Pabillon Medico*, of Nov. 21, quotes from *La Correspondencia* the statement that a young man from Alcocer, twenty-six years of age, and 2.80 metres (9 ft. 2¼ in.) in height, named Augustin Lorenzo Capilla, has been presented to his majesty the King of Spain.

The Late Dr. John R. Van Kleek.—At the monthly meeting of the Board of Trustees of the Physicians' Mutual Aid Society, held at No. 12 W. 31st St., January 4th, 1876, the death of our late associate, Dr. John R. Van Kleek, having been announced to the meeting, it was, on motion,

Resolved, That a committee of three be appointed to draft resolutions in reference to the same.

The Chair appointed Drs. Barry, Gouley, and Vandervoort as this committee, who subsequently presented the following resolutions:

Resolved, That the sudden death of Dr. John R. Van Kleek has deprived the Board of Trustees and the Society of one of its most steadfast and efficient members, whose deep interest in its welfare and usefulness was at all times manifested by his regular attendance at our meetings, and in the share he took in all its deliberations.

Resolved, That the Board of Trustees, in common with those Societies of which he was an honored member, deeply deplore the loss they have sustained, and present to the family of the deceased their sympathy and heartfelt sorrow in this their hour of trial.

Resolved, That a copy of the above resolutions, signed by the President and Secretary, be transmitted to the family of the deceased.

Mark Blumenthal, M.D., *President*.
Frank P. Foster, M.D., *Secretary*.

The Deanship of the Faculty of Medicine in Paris has at last been accepted by Professor Vulpian. Professors Broca and Sappey are spoken of as the assessors to be appointed.

Registrars as Agents for Quack Infant Medicine Vendors.—The proprietors of an English quack medicine, which is widely advertised to afford instant relief in convulsions, flatulency, affections of the bowels, difficult teething, thrush, rickets, measles, whooping-cough, or vaccine inoculation, and rejoices in the name of "Infants' Preservative," have recently adopted a new method to push their nostrum. A circular has been addressed to every registrar of births and deaths in England and Wales, offering to pay him for delivering a circular advertisement of this nostrum, together with the vaccination notice at the registration of every birth. As there are 2,193 registrars in all in the districts named, it is probable that the project will be a paying one, although a considerable number may decline to become the agents of the scheme.

Is Cowpox Preventive of Foot-and-Mouth Disease.—M. Felizet, of Elbeuf, has observed that, while epidemics of cowpox and foot-and-mouth disease have been prevalent simultaneously in his vicinity, no beast affected with cowpox has, up to this date, been attacked with foot-and-mouth disease. Following out this observation, M. Felizet has, during the last four months, vaccinated thirty oxen, and not one of the twenty-five beasts effectually inoculated has, up to this date, shown any sign of foot-and-mouth disease, although living among animals infected largely with it. M. Felizet communicates this observation to the *Recueil de Médecine Vétérinaire*, the editor of which, M. Bouley, suggests that in order to ascertain if cowpox is preservative against this disease the experiment should be reversed, and animals which have had the foot-and-mouth disease should be vaccinated.

Original Lecture.

UNUSUAL UTERINE HEMORRHAGES.

BEING REMARKS MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE, JANUARY 20, 1876, ON A PAPER READ BY DR. H. T. HANKS, "ON THE CAUSES AND TREATMENT OF CASES OF UNUSUAL UTERINE HEMORRHAGES."

By FORDYCE BARKER, M.D.

Mr. President and Gentlemen:—The subject now before the Academy for discussion is one of great importance and interest, and one which every practitioner must fully understand, because it constitutes a prominent symptom in a large class of cases.

The paper to which we have listened this evening is a conscientious study of this subject, and does its author credit; but the subject is so large that no single paper, of reasonable length, can embrace all the topics which it involves.

Menorrhagia and metrorrhagia are either active or passive. They are active where dependent upon rupture of blood-vessels occurring in connection with excessive fluxion of blood towards the uterus. Passive menorrhagias and metrorrhagias are those which occur not only from excessive determination of blood towards the uterus, but are associated with a depraved condition of the blood, or a weakened condition of the blood-vessels of the part, or impeded return of the venous blood.

In studying the causes of menorrhagia and metrorrhagia, we have first to notice the essential condition of the pelvic organs associated with the function of menstruation. Those cases which depend upon some peculiar condition affecting the uterus itself have been fully discussed in the paper read by Dr. Hanks, and I do not, therefore, propose to go over that portion of the subject. Of the conditions which give rise to active hemorrhage from the uterus, there is only one which has not been alluded to by the author of this paper; nor do we find any special reference made to it by writers upon diseases of women, namely, a hyperæmic condition of the organ dependent upon perimetric exudation. In some of these cases, the uterus is bound down by exudative adhesions, hyperæmia results in consequence of an impeded return of the circulation, and at the time of the physiological congestion of the menstrual period, menorrhagia is a result.

There is a class of cases in which uterine hemorrhage occurs independently of any peculiar condition of the uterus itself.

Certain conditions of the ovaries may give rise to an unusual discharge of blood from the uterine cavity.

Acute ovaritis is one of these conditions; and although very rare in the non-puerperal woman, yet under the influence of strong sexual excitement, or by some sudden shock, emotional or physical, the process of ovulation is arrested, acute ovaritis is excited, an increased fluxion of blood towards the uterus is developed, and profuse hemorrhage may follow.

Ovarian dysmenorrhœa is another condition which is sometimes attended by profuse uterine hemorrhage, although deficient menstrual discharge is more frequent. There is what has been termed the ovarian temperament, a condition in which the ovarian function is very active, fully completed, while the uterine function and development are correspondingly imperfect.

This class of cases is characterized by the early appearance of menstruation, by an excitable nervous temperament, a tendency to hysteria; and when menstruation is to appear, the function will be preceded for two or three days, or even more, by languor, nausea, headache, pains in the breast, and frequently by severe pains in the region of the ovaries; and when at last the menstrual discharge appears, in a certain although not large percentage of cases it is apt to be excessive. These cases of ovarian dysmenorrhœa and menorrhagia are not very rare. In some instances great benefit is derived from the use of bromide of potassium administered in free doses for a few days previous to the occurrence of menstruation; and to this may be added leeching at the commencement of the ovarian symptoms. Of course the woman should maintain the most perfect quiet and rest in the recumbent posture during the entire time occupied by each menstrual epoch. Sometimes the shock developed in this class of cases will be such as to require an entirely opposite course of treatment.

Here again the plan to be pursued is determined by the general condition of the system, and if there is a depressed condition present, it must be met by the use of those agents so well recognized as being proper and important in the treatment of shock and depression under any circumstances.

Both plethoric and anæmic conditions of the system are found associated with ovarian dysmenorrhœa and menorrhagia.

Acute ovarian displacements, such as a sudden prolapsus of an ovary from violent effort, or shock, or produced by constipation, may give rise to menorrhagia, as a result of the highly congested ovary.

When this accident occurs it will be attended by acute symptoms of displacement of the ovary; and the patient suffers greatly from the characteristic pains which attend this displacement, and the condition may be accompanied by menorrhagia extending over two or three menstrual periods. As a matter of course, the rational method of treatment under these circumstances is to overcome the displacement and the ovarian congestion.

There is another class of cases in which both menorrhagia and metrorrhagia occur, which are due to *conditions of organs remote from the uterus*, or constitutional causes, if you choose to call them such.

Profuse hemorrhage from the uterus may result from obstructed portal circulation, obstructed circulation through the right cavities of the heart, and also from certain diseases of the kidneys.

Disturbed brain action from emotional causes may be followed by violent uterine hemorrhage. Such cases must have fallen under the clinical observation of most who have been long in practice, which are entirely unassociated with any evidence of local affections of the uterus.

Again, we have constitutional causes of uterine hemorrhage, which may be regarded as *toxic*.

Malaria is not unfrequently the cause of menorrhagia, not always profuse, but the menstrual flow is prolonged unduly by the general impairment of the constitution and the defective nutrition of the blood vessels of the uterus from the continued influence of malaria.

Menorrhagia may be caused by the toxic influence of various exanthemata. A most remarkable case of menorrhagia once came under my observation, and occurred in the person of a girl, æt. 11 years, the daughter of a member of this Academy, who was suffering

from measles. The exhaustion present in that case was equal to anything I ever saw in the adult female, having profuse uterine hemorrhage from any other cause. It was finally arrested, after a great variety of measures adopted had failed, by the introduction of an alum cone into the cervix. This is the only case I have ever seen in connection with measles.

I have seen four cases of this character occurring in patients sick with scarlet fever. It is also said to occur with typhoid fever, small-pox, yellow fever, etc.; but associated with these latter, menorrhagia has never fallen under my observation.

There is another class of cases in which excessive uterine hemorrhage occurs, dependent upon a *constitutional cause somewhat peculiar*. Perhaps I am wrong in classing these cases under a constitutional head; but the class of cases to which I refer may be described as follows:

A woman who has been free from any uterine disease, perhaps has borne one or two children, suddenly begins to grow stout; exhibits a remarkable tendency to obesity; so that from being a thin, spare woman, she increases in weight from fifteen to fifty pounds, or even more, and with this remarkable tendency to obesity there is in some cases a rapid diminution in the amount of blood lost at each menstrual period.

But there are other cases belonging to the same class, where, instead of diminution in the menstrual discharge, this tendency to obesity is accompanied by an excessive uterine hemorrhage.

These are troublesome cases, for the reason that you will suspect, from the severity of the flow, some serious uterine lesion; but when you come to make the most careful examination you will be rewarded by a failure to detect any condition which will satisfactorily explain the occurrence of the hemorrhage.

The only thing which does explain the hemorrhage in these cases is the increased size and consequent plethora of the uterus.

I think this class of cases is not very rare. I have repeatedly examined the internal surface of the uterus, after dilating the cervix with compressed sponge, in these cases, feeling certain that I should find some uterine disease which would account for the profuse flow, but have been disappointed in the same number of cases by finding it entirely free from any lesion or disease appreciable or discoverable by the most careful examination. The appearance of these patients is usually healthy, and the countenance is commonly flushed, but at the same time they are anæmic. The blood is impoverished, and the patient has a flushed face simply because the capillaries upon the surface, which are not large enough to allow blood of a normal character to pass through them, now carry red anæmic blood, and the slightest emotion or exercise causes them to be surcharged and the face to become flushed. They are cases of anæmia, and when placed upon the use of tonics, quinine, iron, chlorate of potassa, etc., instead of getting stouter and increasing in weight, they will diminish in size and weight, while the patient is greatly improved in health and strength. It has seemed to me also that there are certain moral phenomena peculiar to this class of cases, for these patients almost invariably believe that they are suffering from some disease of the heart. They are especially liable to attacks of palpitation, and a very frequent complaint will be that they have awakened in the night and found that the heart has stopped beating.

The plan of treatment which I adopt for these cases is first to administer the acetate of ammonia and saline cathartics for the purpose of depleting the blood of its excess of watery elements. Next I use chlorate of potash as an agent of very great value, on account of the influence it has in changing the condition of the blood; and then come the preparations of iron.

In immediate association with this class of cases comes another form of menorrhagia, namely, *chlorotic menorrhagia*. We may have chlorotic menorrhagia as well as chlorotic amenorrhœa, although it is not of such frequent occurrence. These cases, however, are sufficiently frequent to be met with by any man with an ordinary amount of practice.

Another class of cases, which every practitioner must constantly come in contact with, is *menorrhagia associated with the climacteric period*. These form a class of troublesome cases. For some reason the menstrual function becomes more active than natural, and is sometimes prolonged as to duration, and abnormal as to frequency of recurrence. Many of these cases occur in women who, at the period of the menopause, have a tendency to become much more corpulent than in former life, and in some such the menorrhagia may be conservative in relieving dangerous plethora, but it is by no means confined to this class. It is also seen in the thin and spare. When it occurs it usually excites great apprehension in the mind of the patient, for, with a great majority of women, the belief is strong that the time of the menopause is the time of all others most favorable for the development of malignant disease of the uterus which will destroy their lives.

And it is only natural that we should expect to find some uterine lesion present, when we take into consideration the changes which this organ has undergone during a series of years. The mucous membrane has been constantly undergoing change, sometimes in the full development of the decidua of pregnancy, and certainly in the formation of the menstrual decidua. It is not surprising, then, that at this period a recurring physiological congestion should in some cases become a chronic engorgement, and arrest the incessant metamorphosis of the internal surface of the organ, which has been going on for thirty years or more, and thus result in some lesion of this surface.

In closing, I will briefly refer to the plan of treatment which I adopt in this class of cases. Where the uterus is found to be increased in size and weight, I direct the patient to use, for a week previous to the return of the expected period, suppositories made after the following formula:

℞. Ext. ergot. aq. (Squibb's)..... ℥ij.
Cacao butter..... ʒ i.
M.
Div. into suppositories No. xii.

One of these suppositories is to be introduced into the rectum morning, noon, and night; and I always give positive directions that they shall be carried far up into the bowel, and the patient must keep the recumbent posture for at least one hour. These are to be continued for a week previous to menstruation, and also throughout its duration. I prefer to use ergot in this manner, rather than by the hypodermic syringe, for the reason that the remedy is easily handled by the patient or nurse, and you avoid the risk of troublesome abscesses in the tegumentary walls of the abdomen, which in my hands have frequently followed the use of the ergot by the hypodermic syringe.

Now, if the hemorrhage is prolonged, although not excessive, I infer that there is some lesion affecting the lining membrane of the uterus.

I then have resorted to another plan of treatment, which, since I commenced it, I have rarely found neces-

sary to repeat in any case beyond the second menstrual return.

In those cases, therefore, of irregular uterine hemorrhage seen in connection with the climacteric period, sometimes prolonged, sometimes profuse, I introduce into the cavity of the uterus cylinders of iodoform made according to the following formula:

℞. Iodoform ..... ʒ jiss.
Gum tragacanth ..... gr. xv.
Mucil. ..... q. s.
M.

Div. into cylinders No. x., each one and one-half inches in length.

One of these cylinders is to be carried completely into the cavity of the uterus, and a pledget of cotton introduced against the cervix to retain it in position. Introduce one of these cylinders daily for five or six days previous to menstruation.

The only objection to them is the excessively disagreeable odor which attends their use.

I have frequently had patients complain of a most disgusting taste in the mouth, in less than two minutes after one of these cylinders had been introduced into the cavity of the uterus. But to me, the results which have followed their use have been most satisfactory. These cases of climacteric hemorrhage are quite common, and are often found very troublesome to the practitioner. By the use of the suppositories of Squibb's aqueous extract of ergot, the chronic engorgement of the uterus may generally be effectually overcome. If the menorrhagia still persists, we have good reason for suspecting lesion of the internal surface of the uterus, which I think is cicatrized by the cylinders of iodoform. I have formerly used for this purpose sulphate of zinc, introduced into the cavity of the uterus, and in some cases of profuse hemorrhage the solution of the persulphate of iron; but, in all those cases in which the cylinders of iodoform have been used for some days previous to the appearance of the flow, there has been subsequently no hemorrhage of sufficient importance to make the solution of the persulphate necessary.

I have sometimes found it necessary to use the suppositories at each recurring period for several months, as the tendency to engorgement of the uterus is very difficult to overcome at the period of the menopause.

Short-sightedness in France.—The number of short-sighted persons in France is said to be steadily on the increase; and as this condition would constitute a serious inconvenience in a military point of view, the authorities have become anxious about the matter, and have requested the Academy of Medicine to investigate the cause, and, if possible, to remedy the evil. The subject has been lately discussed by the Academy, but the conclusions arrived at are not yet known, but it would not be surprising if the use of spectacles should be introduced in the army. Hitherto only officers have been allowed to wear spectacles, but the privilege will have to be extended to the soldiers in the ranks if it be desired to muster a strong army, particularly as it has been discovered that, in many cases, myopia is artificially produced in order to escape the conscription. This is done by reading with strong concave glasses, so graduated as to reduce the visual power to the use of the No. 2 or 3 glasses.

Dr. E. P. Willett, the chief of a gang of body-snatchers, who was recently captured, pleaded guilty in the Criminal Court of Chicago, Jan. 25. He was charged with robbing the grave of a mother and child in Graceland Cemetery a few months ago.

Original Communications.

DIVULSION OF URETHRAL STRICTURE, FOLLOWED BY COPIOUS HEMORRHAGE AT THE END OF A WEEK.

By M. A. WILSON, M.D.,

late surgeon to city work-house and district physician to the out door poor, cinn.; late attending physician to new york, north western, and bellevue dispensaries, member county medical society, etc

I report the following case, for the reason that I have been unable to find any record of a similar one.

I have also inquired of a number of my medical acquaintances in this city, some of them prominent specialists in this department, none of whom could direct me where to find recorded a like one, in fact saying that they had never heard of such a case. Hemorrhage from the urethra (I refer exclusively to that consequent upon surgical procedures), is quite common, and occurs frequently as a result of the passage of sounds, bougies, or catheters, internal urethrotomy, single or otherwise, or any other traumatic injury to the urethra.

Hemorrhage after urethrotomy may be immediate or secondary; the latter form occurring in only a limited number of cases, possibly within twenty-four hours, or not until after the lapse of ten or twelve days; but it is rare, and to be regarded as a consequence of unskillful operating.

In connection with, or immediately following divulsion, a few drops of blood escape, which are not of any moment; it rather indicates that the divulsor "has done its work," and that the stricture-tissue has been ruptured. But a secondary *copious* hemorrhage, following the simple, rapid operation of divulsion, occurring eight days afterwards, in a strong, healthy man, no other existing complications, without any recognizable cause, is, as I have just said, an accident not yet mentioned by any writer that I am aware of.

Captain S., æt. 32, strong, rather stout, weight about 175 lbs., called upon me July 24th, 1875; had been in U.S.A. (cavalry service) since 1861, with the exception of last two years, and had suffered at one time for three months from intermittent fever; remainder of the time "perfectly well;" never contracted syphilis. Has had gonorrhœa three times, the first in 1863, lasting eight months; the others of short duration, during one of which epididymitis of the right testicle was developed. In the winter of 1873–4 he was treated for urethral stricture by an army surgeon, but he does not recollect which instrument and number the doctor *began* with; thinks the treatment ended when he reached No. 12 E. steel sound.

The treatment was interrupted by another attack of epididymitis, right side, upon subsidence of which the testicle was strapped and use of sounds continued.

In the early part of June, 1875, he again observed a slight urethral muco-purulent discharge, not accompanied with "ardor urinæ" or acute inflammation, but he did not know whether he had contracted a fresh gonorrhœa or not.

From that time until his call upon me (July 24th) he had been treating himself, using pure claret as an injection, and taking internally *his* prescription, a mixture of copaiba, tr. aloes, and spts. nitr. dulc. He was not, however, very successful, and requested me to treat him for "gleet."

Making it an invariable rule in patients with such histories to carefully examine the urethra, I at once did so in this case.

First picking up a No. 4 (English) flexible bougie, I found it to pass with difficulty. A bougie-à-boule, smaller size, was then introduced, which located the stricture (but one) in the membranous urethra, one-half an inch in length, very firm.

I then passed a filiform guide into the bladder, and upon it a No. 4 tunneled sound, which, upon withdrawal, I endeavored to follow with a No. 5 or 6 flexible bougie; but the stricture seemed so resisting and dense that they only bent sharply upon themselves, and I did not succeed. His urethra being very sensitive, and a slight bleeding taking place, I desisted entirely that day (Saturday), and requested him to come again Monday following.

At this visit it seemed impossible to make further progress towards a cure "by dilatation," either with flexible or inflexible instruments of any kind, and I at once advised "divulsion," especially as he was hurried for time to attend to important business in Boston, go to Europe, and quickly return to the south.

Besides, the urethral canal was very irritable; these few introductions of instruments had rendered it very sensitive, causing quite an amount of pain, and always accompanied by slight bleeding, however gently and carefully made.

On the following Wednesday P.M., July 28, 1875, with the kind assistance of Prof. E. L. Keyes (Dr. R. W. Taylor was also present), I ruptured the stricture with Sir Henry Thompson's divulsor to a point of dilatation equal to a No. 20 E. sound. But few drops of blood followed, very little pain was felt, no anæsthetic employed. After withdrawal of the divulsor the meatus was incised, and a No. 16 sound passed readily through the old site of stricture into the bladder.

A hypodermic injection of a quarter of a grain of morphia and ten grains of quinine were then administered, and the patient sent home in a carriage.

I should mention that before the operation the right epididymis was slightly tender upon pressure, somewhat indurated, but not swollen, for which condition a suspensory bandage was advised, in conjunction with rest and quietude. Beyond granular effervescent potass. bicarb., to render the urine less irritating, ten grains in water three times daily, nothing else was prescribed.

As he had very little business in New York to attend to, he remained almost constantly in his room and in bed; his bowels regular, urination occasioning him no pain nor difficulty whatever.

He felt perfectly well (no complications whatever arising) until the night of the same day as the operation, one week afterwards, I was at twelve o'clock hastily summoned to his bedside, and found to my astonishment that he had, within twenty-five minutes, lost at least from one to one and a half pints of blood per urethra (judging from the saturated bed-clothes, towels, etc.), clear, fresh, red, and still flowing freely when I arrived. He was pale, and much alarmed; had enveloped the genitals with cold, wet towels without effect. I at once employed ice freely, placing it upon and about the penis, scrotum, perinæum, pubis, in the rectum, and gave a teaspoonful of fluid extract of ergot. These measures producing no marked effect, I passed a No. 14 sound, which promptly checked the flow, except a very slight oozing from the meatus.

Giving him a half drachm each of fl. ext. ergot and laudanum, placing towels and cloths firmly against the perinæum, leaving the sound still within the urethra, directing a friend of his (who consented to remain with him all night) to continue the ice in moderation, with a teasponful of the ergot every two hours, I left him.

I of course thought of injecting the urethra with persulphate of iron, etc., but as the sound, pressure upon the perinæum, ice, etc., seemed to control it (by forming, I suppose, a urethral clot or clots), I considered that measure unnecessary.

Returning next morning at seven o'clock, learned that he had slept very well, had taken two doses of ergot, but of course did not feel particularly comfortable.

The blood had coagulated upon the sound at the meatus, to the extent probably of half an inch in depth, merely from the "oozing."

As he wished very much to urinate, I withdrew it without difficulty, causing no pain, nor did urination; but, as I feared, the movements necessary to this act, together with the removal of the sound, pressure, and ice, brought on again an active fresh hemorrhage.

For the time being I placed a folded dry towel upon the end of my cane, and pressed it against the perinæum, just at the location of the stricture, the other end touching the footboard, and had him "push himself" against it, regulating the pressure according to the pain or his own feelings.

This procedure answered so well that I had his friend procure a stick about three inches wide and three or four feet long, which I substituted for the cane, occasioning him no discomfort whatever. Discontinuing the ergot and ice, I prescribed fifteen drops of liq. ferri perchlor. in simple syrup and cinnamon water every hour, also one grain of opium with two of acetate of lead every three hours; directed him to remain quietly in bed, to eat any light food he might fancy, and not to micturate until I returned.

At next visit, four o'clock that afternoon, there was but the faintest trace of fresh blood at the meatus, although he had for last hour or two lessened the perineal pressure very greatly by drawing himself away from the stick somewhat. During and after urinating there was no appearance of fresh blood, and I removed the pressure (stick) entirely.

Would have injected the urethra had it been necessary.

Continued the iron internally, stopped the pills. I called at eleven that P.M.; patient very comfortable, had had a good appetite, was in good spirits.

He again urinated freely and easily, no blood to be seen. Expressing a desire to have his bowels move, I advised that any such immediate attempt be postponed until I should see him again.

The next morning he seemed "as well as ever," and all treatment was discontinued.

He remained quietly in his room for a day or so, and on the sixth day after the hemorrhage, twelfth after divulsion, Nos. 16 and 17 steel sounds were passed without difficulty or pain.

Notwithstanding the ice, hemorrhage, recumbent position, suspensory bandage, rest, etc., the right epididymis was still about as sensitive and tender as at first.

I advised the bandage to be worn constantly, and for him to remain quietly in the hotel. He "drank" very little at any time, "nothing" since first call upon me.

August 12th. Introduced Nos. 17 and 18, and on August 14th the same; not employing a larger sound than No. 18, for the reason that he expected hourly almost to leave the city, intending to continue the treatment after his return.

Five grains of quinine were administered after each introduction, as a prophylactic against urethral fever.

The meatus was again incised, owing to the pain caused by the sound at that point.

August 15th. Wishing to go east for a few days, he requested further advice relative to his "sore testicles," for the *left* epididymis was now slightly tender and indurated, it having also been injured, he said, against the pommel of a saddle while riding some years ago. I prescribed the following: R. Plumbi iodid. grs. xii., ungt. stramonii ℥ i. M. S. portion the size of a hazel-nut to be rubbed into the scrotum night and morning; a like amount to be spread over a piece of rag or lint, laid upon the scrotum, covered with oil-silk to prevent evaporation, etc., the suspensory bandage to enclose all. Internally, R. Potass. iodid. ℥ i. ext. conii mac. ℈ ɔ., syr. sarsæ co. ℥ ij., aquæ dest. ℥ iv. M. S. a tablespoonful three times daily.

Within a day or two he sailed for Europe; has not since returned, nor have I heard from him.

There are several points of interest in connection with this case, one of which is its rarity; for it may be that I have not been sufficiently thorough in my search through the literature of the subject, and some cases *may* have been reported.

Considering, also, that such hemorrhage has not come within the experience of the above-mentioned surgeons and others of this city, I feel justified in alluding to its rarity.

In the next place, the obscurity of the origin and cause of such a *free* hemorrhage, notwithstanding the almost perfect conditions and hygienic surroundings of this patient, for the whole week subsequent to the operation. A man of wealth, with no business cares nor anxieties, taking no exercise, lying in bed almost constantly in one of our best hotels, with good attendance; drinking no spiritous liquors whatever, eating plain food; no hemorrhagic diathesis; health excellent, no sexual intercourse, venereal excitement, erections or chordee, regarding all of which I made special inquiry.

The exact condition producing hemorrhage under such circumstances can of course only be surmised; had there been any cutting (urethrotomy), we might more naturally have expected such a sequence.

Ulceration, as the result of the violence or injury inflicted upon the mucous membrane or other tissues at the strictured point, and proceeding so far as to cause the opening of a small blood-vessel at that point, would easily account for it; and this I believe to be the explanation of the accident, although the discharge after continued the same as before the operation—slight, gleety, neither profuse nor purulent—nor did he complain of any tenderness or soreness along the urethra, two features or symptoms we would rather expect to find accompanying an ulceration so extensive as to open a blood-vessel. Again, for so thorough a lesion as this (if it did exist), it healed remarkably well and quickly; for no sounds were passed nor any treatment employed for nearly a week after the bleeding (nothing to indicate ulceration during this time), and *then* only the introduction of sounds seventeen and eighteen three times before his departure for Europe.

In conclusion, this case proves that the operation of divulsion *alone*, and only upon *one* stricture, although so simple and readily performed, however gently and carefully done, *may* be followed by hemorrhage sufficiently serious to alarm and debilitate the patient and to demand of the surgeon prompt and energetic measures for its control.

12 East Twenty-Eighth Street.

Dr. L. A. Stimson has been appointed Curator to the Charity Hospital.

THE IMPENDING DANGER.

By J. B. MATTISON, M.D.,

Brooklyn, N. Y.

America is in peril of becoming a nation of opium inebriates. Tens of thousands of hapless devotees bow at the shrine of this seductive goddess, and, from the palace and the poorhouse, the hall and the hovel, is being recruited the increasing host marching downward, with steps, slow but sure, to death or degradation.

That this seemingly sensational statement is not exaggerated, can be proven by statistics and by the assertions of those who, with abundant opportunities for observation, have not failed to note the gradually accumulating evidence of this fact, sad though it be.

From one of, if not *the* leading exponent on the subject of alcoholic and opium intoxication in this country, we have authority for the statement that while the *former* is *diminishing*, the *latter*, undoubtedly, is on the *increase*. Dealers in crude opium, and manufacturers of its alkaloids, assure us that the importation of the one and the production of the other are rising rapidly, year by year; so much so regarding morphia, that, at one of our largest manufacturing centres, the supply is said to be insufficient for the demand.

Accepting these statements as true—and we have no proof to the contrary—the question naturally presents itself, What becomes of the vast amount of this powerful drug? Of the sources of its consumption there are but two: the one, its employment as a therapeutical measure; the other, as a stimulant. Regarding these, the assertion has gone the round of the press, medical and non-medical, that, in the opinion of those competent to judge, not more than one-third is for the former purpose.

Allowing this, the query rises, What is the *fons et origo* of the inordinate demand as a stimulant? Is the initial point of its taking merely the desire for its pleasures, physical and psychical. Or is it, that, once ordered on professional authority for some ill, fancied or real, and continued for a time indefinite, the unfortunate victim, all unconscious of the danger towards which he is drifting, finds himself, when therapeutical necessity for its use has been fulfilled, in the coils of a monster whose subtle power and strong embraces only he that feels them knows?

Touching this point, observation varies, though we think it indisputable that the vast preponderance of testimony favors the cause last mentioned as the primal source of this most deplorable practice. Dr. Geo. Conners, who has lately written upon this subject, holds to the opposite view, his language being, "in accordance with the best information I have been able to gather, the largest number of opium eaters contract the habit from choice, merely for the pleasures of opium."

Foremost among those qualified, from long experience and careful observation, to pass judgment on this question is Dr. Jos. Parrish, for several years President American Association for the Cure of Inebriates, who, summarizing certain facts to be deduced from a most interesting and instructive address delivered before that organization, reaches a directly contrary conclusion, and says, "Men take it, not for social enjoyment, but for a physical necessity."

A prominent physician in this State has written us that, to his knowledge, of more than a half score of opium inebriates who reside in proximity to his office, nearly all assert the inception of their baneful bondage was a prescription containing opium, in one form or another, at the hands of their medical attendants.

One truly commiserable victim, now running under a steady pressure of twelve grains of morphia *per diem*, dates this "horror of a great darkness" resting upon him, to the order of his physician, given years before, to take it for the relief of a pain in the back!

A leading practitioner in a city not far distant recently informed us, that he was assured more than twenty cases of this kind were within the cognizance of one of his professional friends, most of whom dated their durance to an opiate prescription.

Dr. Brinton, in a recent editorial on this topic, asserts that "more than one such instance has occurred to our personal knowledge," and takes decided ground against an indiscriminate prescribing.

From across the ocean come the notes of alarm, Dr. Francis W. Mirnett, Lecturer on Materia Medica at Surgeons' Hall, Edinburgh, being impelled to raise a warning voice on account of three cases of the opium habit coming under his observation within a limited time, and all having their starting-point in a physician's prescription. After detailing them, he remarks as follows, all of which is to be commended to the careful consideration of every practitioner; "This leads me to say that I think there are many cases of chronic disease, or disease in which sleeplessness is a prominent symptom, in which opium is frequently prescribed, without, perhaps, any thought of this danger supervening, and which has led me to believe and practise that it is advisable not to give opium continuously, for any length of time, in those cases, unless in painful and incurable diseases, as cancer, etc., especially if the patient is of a nervous temperament. There is no doubt that pain or sleeplessness, would more frequently have to be endured, but other remedies might be substituted, which would in part, though not entirely, take its place. And if we consider that it would save some, more, perhaps, than many are aware of, from contracting such a habit, I think that, at least, it would be advisable to consider this danger, and bear it in mind, when we are called upon to treat such cases, and believe opium to be indicated; a danger which most readers well know, from their own experience, not to be a fanciful one.

"Medical men are nowadays occasionally assailed with reproach for prescribing stimulants rashly and unnecessarily, and so encouraging a taste for them; but the public are already beginning to find out that, as a rule, if individuals want stimulants, they do not wait to get the sanction of their medical attendant, although they may, and do sometimes, use his name as an excuse.

"But it is otherwise with those whom I have mentioned, who have not known the potency of the drug, at least personally, until it was professionally administered, and who, in all likelihood, would not have known it unless so ordered. And this is generally the rule, I think, that the majority of habitual opium-eaters have, in the first instance, acquired the taste for it after having been ordered it by a medical man; not that I think it by any means a reproach to us, or that we should be afraid to use it on account of the fact that some ill-regulated people will abuse the drug to their own hurt, but for the reason I have mentioned: and in view of this danger, I venture to say that this ought to be borne in mind when we administer opium in these cases, lest we might be the innocent cause of setting the spark to the fire that may only be extinguished with life."

Speaking from personal knowledge and observation, the entire weight of our testimony militates the statement that this direful degradation is induced voluntarily. In a remarkable instance presented the profession the past year—*vide* RECORD, May 1—nearly seven years' servitude, starting in a surgeon's selection of morphia for the relief of a severe sciatica, was endured before the poor bondman came out into perfect freedom.

A lady in one of the New England States, of high culture and eminent social position, fell a victim after only eight weeks' daily use of the hypodermic syringe, and underwent ten days' torture of mind and body ere was broken the last link of the chain that had been unwittingly forged around her.

A lady in this State, after three months' employment of morphia in moderate daily doses, per physician's prescription, awoke to the consciousness that she was in the coils of this monster, and we have yet to learn of her escape.

An intelligent physician of this city, after a few weeks' using of this drug for a severe neuralgia, found himself "in the bonds," and though many months have lapsed he is still enthralled. More cases, all confirmatory, could be cited, but they are unneeded.

Granting the foregoing statements their proper consideration, what is the great lesson to be learned on this all-important subject? Simply this, that the *necessity* for caution in the prescribing of opiates rises to that of a *duty* in view of the fact, incontestable we take it, that much the larger number of pitiable victims to this galling bondage become such through the unintentional ministrations of their medical attendants.

Of all painful disorders demanding a liberal outlay of opiates for relief, none so much so as neuralgia; and it is asserted by one prominent writer on the subject of stimulants and narcotics, that the principal cause of the wide-spread prevalence of the opium habit in this country is the increasing frequency of that disease, and the consequent freedom, amounting at times to recklessness, with which the anodyne properties of this drug are invoked for the mitigation of pain.

Now, it is well known that, in almost the entirety of cases of this neurosis, the exhibition of an opiate is but palliative, scotching, not killing, and exerts a curative effect only so far as, by lessening the susceptibility of the nerve affected, it affords it a chance to rest and an opportunity of regaining its lost tone; a loss every bout of pain increases, and the recovering of which is an absolute essential in the successful management of this hydra-headed disorder.

Again, in the light of recent researches and therapeutical advancement, it is safe to say that the greater proportion of neuralgic cases, other than those beginning somewhat late in life, admit of radical relief if a proper plan of medication be adopted; and of these we hazard little in opining, that a decided majority could be conducted to a successful termination without any such lavish expenditure of opium or its salts, as would expose the patient to the risk of confirmed intoxication.

On this point much has been given the profession of late years, and of those to whom we are thus indebted, none take higher rank than the lamented Anstie, whose classical work on this disease will long remain as a monument to his genius and self-sacrificing devotion.

Of course, it must be admitted there are many instances of incurably painful disease—cancer, locomotor ataxia and the like—where opiates in some form are imperatively demanded; but as in advanced stages of these disorders the fatal ending is inevitable, the same care is not requisite as in those painful but curable cases where, 'twixt two evils, we should choose the lesser,

which, while it might necessitate an increase of patience under suffering, for a time, would not incur the danger of which we have made mention.

In our opinion there is in many, perhaps the majority, of those individuals likely to become opium inebriates, a constitutional condition so in harmony with the snaringly seductive properties of this drug, that its administration in any form for more than a very limited period exposes them to the risk we have mentioned, being a soil in which the sowing of such seed is extremely liable to eventuate in a most bitter fruition. It is not ours to determine the precise nature of this condition, but we strongly suspect it to be largely akin to that peculiar diathesis so strikingly manifested in most cases of genuine neuralgia, the main element of which is a well-marked *hereditary* tendency towards a debilitated state of the nervous system, either special or general. So thoroughly do we thus regard it that, given a case of painful disease, in which the demand for opiates was urgent, and where it might be found essential to continue them for quite a prolonged time, we should deem the probability of forming a habit of opium inebriety in quite direct proportion to whether, on careful genealogical examination, were or were not found well-marked indications of the afore-mentioned diathesis. We do not wish, however, to be understood as saying that where these are wanting the risk is *nil*; nor, on the other hand, that in every instance where they are well manifested the patient is in danger, for we believe there are cases where the system is so intolerant of opium in any form that it is well-nigh impossible to establish a condition of confirmed inebriation.

While insisting upon the fact that physicians' prescriptions are largely responsible for the inception of opium addiction, it must not be overlooked, indeed it cannot be denied, that a most important auxiliary factor in establishing this vicious practice is to be found in the comparative facility with which, the appetite once created, its unhappy victims find means for its perpetuation and still further enslavement at the hands of the dispensing apothecary. As pharmaceutical rules and regulations are at present, this can be accomplished almost without hindrance, and on the easy morality involved in the principle, "If I don't, some one else will," a mode of moralizing which, as has been well observed, is an ugly commentary on the tendencies of the day, conscience can easily be lulled to slumber, and a fresh supply of fuel furnished the flame raging so remorselessly within.

Much has been done of late in elevating the standard of pharmacistical requirements, but more remains to be done. Legislative enactment, prohibiting the refilling an opiate prescription, or the dispensing of opium in any form, unless accompanied by a positive order from the attending physician, would, we are confident, accomplish an immense amount of good in protecting those who otherwise might become the pitiable possessors of a craving so horrible as to be well-nigh irresistible.

That the danger on which we have descanted is far fetched and improbable, we cannot admit. We believe it to be a *fact* staring the profession squarely in the face, and the sooner it rouses to a rightful realization thereof, the better will it be in reducing the ranks of a class of unfortunates deserving our deepest commiseration.

That the vice of opium inebriety would, to a certain extent, prevail despite an observance of the precautions alluded to, we do not doubt; but we unhesitatingly think it would be shorn, in large measure, of the strength it at present possesses, and its now rapidly augmenting proportions be thoroughly checked, and suffer a speedy decline.

In carrying out the reform we have indicated, it should be the aim of every practitioner, when called upon to prescribe this most valuable medicine, to see to it that he exercise a discriminating care in so doing, by careful inquiry as to the neurotic status of his patient from the stand-point of hereditary tendency, and if necessity demands a somewhat prolonged administration, to watch most warily and guard against most strenuously the earliest indications of an appetite that, thoroughly established, will scarcely be denied, and which entails upon its unhappy possessor a darkness so dense, a horror so indescribable, that death, at times, seems preferable.

COMMUNICABILITY OF DIPHTHERIA.

By P. B. PUMYEA, M.D.,

IMLAYSTOWN, N. J.

Is diphtheria contagious, is a question now often asked the physician, and his reply is one of serious importance.

Were it not for the diversity of opinion among physicians as to the communicability of this extremely fatal disease, a statement of the following facts would be unnecessary. The history of the origin and progress of diphtheria, now in my practice, shows its contagious character, and how it *may* be propagated and restricted (in so far as a few cases can).

Charles D., and Mary K., cousins, were both servants in the same family. Mary K. was taken sick with sore throat, and went home. Although complaining a good deal, no physician was called until her only brother was taken sick with sore throat, and was hardly able to swallow. An inspection of his throat at once revealed the nature of his disease, and his subsequent death showed its malignancy. As the neighbors were very much alarmed, no one came near the house, except an uncle, who volunteered his services. He caught the disease and communicated it to his family. Three of his six children died.

On December 5th I was called to see Charles D., the cousin before mentioned, and ascertained that he had diphtheria. As he was not confined to his bed, and his employer did not wish to endanger his own family, he immediately took him home. Less than two weeks subsequently the disease appeared in that family. There were five boys and five girls, and as far as possible the girls were kept away from the boys. Not until all the boys had had the disease and recovered from it did any of the girls take it. They now have it, and one, the youngest, has died. The oldest girl did not live at home, but when she ascertained that her brothers were sick, she came home to visit them and thus caught the disease.

These three families live within a radius of half a mile, and there is not nor has not been another case of diphtheria within a radius of five miles.

Was not the disease in these cases communicated by contagion and its propagation restricted by isolation?

We may not always be able to trace the origin and growth of this insidious disease. Sporadic cases undoubtedly occur, as in scarlatina. Sometimes the atmosphere seems to be so loaded with the contagious miasm as to produce an epidemic. But our inability to trace it or its epidemic character does not disprove its contagiousness, no more than it would that of pertussis or variola.

Prof. Smith, in his work on "Diseases of Children,"

says that the "communicability of this disease is as securely established as almost any doctrine in pathology."

It is much to be regretted that there is not *entire* unanimity of opinion among physicians in regard to the contagious nature of this disease, and that the people are not taught to shun it as they would small-pox.

When both the profession and the people acknowledge and appreciate the communicability of diphtheria, *then* it may be more restricted, and our children better protected from this insatiable monster.

January 10, 1875.

Progress of Medical Science.

Fatty Embolism as a Cause of Sudden Death after Injuries of the Bones.—Prof. V. Czerny, of Freiburg, discusses this subject mainly in its clinical aspects, taking the reports of two cases as a text, and gives abundant references to current literature bearing on it. The first case was that of a healthy man of 24, who sustained a simple fracture of the right thigh in its upper third, the result of being buried by the falling of a sand-bank. This was on Nov. 16. The surgeon who was called to him found that he suffered little pain at the seat of the fracture, but could not lie down without difficulty, especially on the back, and could not breathe easily. On the 18th, the swelling having subsided, a pasteboard splint was applied, the patient at the time finding it very difficult to maintain a half-sitting posture. On the night of the 20th great dyspnœa and depression suddenly manifested themselves, without inflammation, and he died on the 22d. The authorities subsequently had the body disinterred and examined. The fragments of bone were in proper position, but both lungs were full of venous blood, and the membranes, substance, and blood-vessels of the brain also similarly filled. It appears that E. Wagner in 1865 stated his opinion that a sudden fatty embolism was capable of inducing hyperæmia of the lungs, œdema, and death; and in 1866 F. Busch established that the medulla of the bones when crushed was taken up by the veins and lymphatics, and caused emboli in the lungs, and death. Still these views do not appear to have been very generally recognized, although cases of fatty embolism causing sudden death have been occasionally reported. Czerny's second case is as follows: J. S., aged 32, a strong and healthy mason, sustained a simple fracture of the right thigh just below the middle, as a consequence of a fall from a scaffold. He also had a flesh wound on the chin, which was sewed up and dressed antiseptically. He was taken at once to the clinique, where dressings and applications of ice were made. He complained very little of pain, although quite conscious. This on Nov. 14, 1874. On the following day Prof. C., in a clinical lecture on the case, mentioned that, although free from fever on the previous day, his temperature that morning was nearly 103° F., and he gave a guarded prognosis. In the evening the temperature was almost a degree higher. Although at night he had no pain, he was restless, and had at intervals of three hours two doses of about $\frac{1}{3}$ gr. each of morphine. Some hours after midnight he was found comatose, with deep and frequent respiration, accompanied by coarse râles. The chest was resonant on percussion. Pulse 100, full and strong. He was bled from the arm, but obtained no relief, and died at half-past seven, thirty-eight hours after the injury. At the autopsy both lungs contained air and fluid. The left side of the heart was contracted, and there were coagula in both sides. The vessels of the pia mater and of the brain were distended with blood, and in both of these were numerous small ecchymoses. There were extensive extravasations of blood at and about the seat of fracture, but the femoral vein and artery were not wounded. The microscope revealed throughout the lungs a firm injection of all the smaller arteries and the capillaries, with clear fluid fat. Likewise in the brain, corresponding to the small ecchymoses, were branching fatty emboli in the vessels. Fat was also in the vessels of the kidneys and liver. The fatty embolism of the lungs was considered a sufficient cause of death. Prof. C. has given *in extenso* the reasons which led him to express the opinion, as he did before the autopsy, that fatty embolism would be found. He quotes the statement from Busch that fatty embolism begins in the first few hours after the injury. The difficulty of respiration would point to this condition. Possibly the slight sensitiveness to pain may also be symptomatic of it. He made a series of experiments on animals to clear up some points in his mind, but the results do not appear to have been very positive. Shock cannot be held to explain a death after injury, when an interval of several hours of good condition has intervened between the injury and death. He concludes that fatty embolism is of essential significance only after injuries of the bones, and perhaps osteo-myelitis. We may suspect this condition when after such injuries a rapid failure sets in, with interference with the circulation in the lungs; and secondarily in the general capillary circulation, without other cause, and very shortly after the injury is received. It should be accepted as a sufficient cause for death, however, only when the autopsy reveals a degree of it so extensive, or in such important organs, as materially to interfere with their functions.—*Berl. klin. Wochenschrift*, *Nov.* 1 and 8, 1875.

Oxide of Silver in Locomotor Ataxia.—Dr. Chas. Carter has treated two cases with this drug. In one case of seven years' standing, one half-grain doses three times daily were given. The quantity was gradually increased for seventeen weeks, until ten grains three times a day for one week were administered. It was then found necessary to suspend the medicine on account of a severe attack of diarrhœa, which subsided without further treatment. During these seventeen weeks the neuralgic attacks, which before were so frequent and painful, had only occurred three times, and then very slightly. Reflex action, and the power to flex and extend the feet, were now well marked. Before treatment the patient was unable to walk the streets at night, or stand with his eyes closed. He now could walk at night, but was still unable to stand with closed eyes. In the second case, of three and one-half years' standing, there was chronic diarrhœa as a complication. After getting the diarrhœa under control, the oxide of silver was given in half-grain doses, which proved quite sufficient to relieve the neuralgic attacks. The treatment extended over a period of three months, and with results as satisfactory as in the first case. These cases of Dr. Carter's would seem to show that the oxide of silver controls the neuralgic disorder in advanced cases, and even arrests the further progress of the disease.—*The Medical and Surgical Reporter*, December 18, 1875.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, January 29, 1876.

HOSPITAL CONSTRUCTION AND ORGANIZATION.*

II.

THE question next in importance to the adequate preparation of ground surface, is the material of which the buildings are to be composed, and their concretion and arrangement into structure. What is generally said by writers as to this matter, is too often but the expression of taste, or in utter disregard of the health-considerations involved. Some of our authors speak merely at a venture, without appreciating the significance for health involved, in choice of material.

Dr. Billings (p. 15) refers to "impervious walls," but expresses a great doubt (p. 28) whether it is feasible to attempt to make walls and ceilings impermeable. He speaks both of a hollow wall and of a space between plaster and wall, such as we have in ordinary furring and lathing, and suggests such construction of the space as will permit it, when needed, to be charged with chlorine or sulphurous gas for disinfection.

Dr. Folsom (p. 66) advises a brick construction of double wall, with closed air space and plastering directly on brick work, and so prepared as to be "hard, smooth, and *impermeable like stone*, so that they can be freely scrubbed; or if this is impracticable, very thin furring should be so attached as to be easily removed and replaced." A coat of paint occasionally is also suggested. J. (p. 112) gives an indiscriminate choice between brick, stone and iron, and suggests granite as the most durable. "The walls should be impermeable," and Parian cement or glazed tiles or slabs joined perfectly by a good cement should form the surface wall inside. The floor of the same should be covered with oil-cloth.

Our next author (p. 197) says that "north walls, even if wholly impermeable to air, become chilled," and so require much heat to keep rooms bounded by them warm. If stone be used (p. 199) it should not be so white as to be glaring, or so dark as to be gloomy. Whatever be the exterior, the inner walls and the lining of the outer should be of well burned brick well-laid with strong mortar. He also advocates an air space. Plastering should be applied directly to the walls, with hard plaster well polished as a finish. His remarks (p. 201) as to wet cleansing contrast strongly with those of Dr. Folsom (p. 66), and as to floors with those of Dr. Jones (p. 112).

S. recommends porous brick, hollow walls with air space, which may be fumigated, and plastering to be on lath, with a good hard finish surface. He speaks of porous walls as if they needed care as to cleansing, and of hollow walls as warmer and less liable to dampness. He also (p. 312) suggests that the air spaces may be made to communicate with the hot air chamber for warming. He suggests washing or gaseous disinfection of walls, and in a note of Angus Smith's draws attention to dry rubbing. A reference is made (p. 302) to the roofing of glass and iron of the Grand Central Depot, but preference is given to the common ceiling.

Mr. Niernsee (p. 331) constructs the orphan asylum of brick, with high-pitched and band coursed slated roofs, with all partitions of brick. He lays down as an axiom (p. 336), "that the most impervious material should be used for inside construction of hospitals," and quotes (p. 337) "high authority" for two-story structures, "provided the materials used are as *impermeable* as can be obtained. The outer wall (p. 338) is to be double and hollow, and the whole inside to be so coated and polished as to be impermeable." If this fails, Dutch tile or glazed earthenware are to be used, or the walls lined with one-quarter inch corrugated glass, both of which are declared "absolutely impermeable." The flooring, also, may be encaustic or glazed pottery tile.

The views thus expressed by some of our authors seem to be in the wrong direction, and to fail in comprehension of one of the chief designs of structure. A building for habitation is not intended, in any of its parts, for the entire exclusion of outside air. Its design is to protect from winds and storms, and to modify outside temperature to that extent which sedation or sickness or any changed condition of the in-dwellers may require. All this is perfectly consistent with the admission of air without perceptible currents through all parts of the structure itself. Indeed, without this we are more liable to that impurity of air which causes abnormal sensations of heat and cold. In the very building-walls we create sources of dampness which cause chilliness and disturbed temperature. The great problems of heating and ventilation are more involved in materials for structure and its seam-

* HOSPITAL PLANS. *Five Essays Relating to the Construction, Organization, and Management of Hospitals.* Contributed by their Authors for the Johns Hopkins Hospital, of Baltimore. New York: William Wood & Co. 1875. 8vo, pp. 353.

tific arrangement than in the discussion of special contrivances, important as these latter may be. It is not impermeability of walls that we want at all, but such permeability for air as prevents both dampness and draught. Long since the distinguished chemist Roscoe (in the *Chemical Transactions*, London), insisted on porosity of wall structure. The more recent investigations of Pettenkofer, Tarn, and others, no longer leave it a question that in the accurate study of structure throughout we are to seek to abate many of the demands now made for artificial *addenda*. Already the porosity of different material, of different specimens of the same general material, the best modes of combining mortar, cement, grouting, or other soft mixtures for interspaces is being tested. Richardson, in his recent "Model House," even objects to sea sand as unfit for walls because of the salt it contains. If material is too porous, it becomes the sponge for water instead of for air. If too compact, it retains dampness, and cannot be kept dry on account of the exclusion of air. We have before us an examination of bricks made by the chemist of the St. Louis Board of Health, in which bricks taken from different buildings varied from 1 to 15 ounces in the amount of water they would absorb. Different clays and different methods of mixing, pressing, and burning, give different results, independent of mere hardness. We have by actual experiment found large variation in this regard. In one case, by arranging bricks of different porosity in successive layers, we secured without air spaces a dry surface for plastering inside and a dry house.

The question of giving a smooth, unadherent surface to an inside wall, is quite different from the advocacy of air impermeability. In fact an air-tight surface acts as a condenser, and so secures a film of moisture which can do more than all else to catch and locate fomites. The experiments of Franklin and of Wells on the relations of different materials as to heat and moisture, apply directly to clothing, and just as directly to structural protection. A dress which is not too closely woven or pressed, is warmer than too close material, because the air in the interstices prevents moisture, and is a poor conductor of heat. In a building we want a smooth wall, with rightly modified porosity. Hollow walls do not accomplish this alike for all substances or for all localities. The spaces may become the dwelling-place of dead air. As generally arranged, they are crossed with girders for the anchoring of walls, and so are not continuous spaces. We commend to physicists the study whether continuous courses of bricks or material of varying porosity are not more likely to secure dryness, ventilation, and uniformity of wall temperature. If spaces are wanted for fires or ventilating, is it not better to have successive flues rather than one continuous space.

We know of no good reason for plastering directly on the structural wall, although far more feasible on the kind of inclosure we have indicated than on the other. Lath and plaster wall, when rubbed to a polished smoothness and perhaps painted with zinc, is permeable. The interspace made by furring and by the lath is favorable to ventilation and equalization of temperature, and the spruce lath are in no danger of impregnation. It is a question whether chimneys in the part facing rooms may not be made of soft or porous brick, so as to act with some ventilating power throughout their length. In an occupied ward the draft toward the chimney is quite assured, or if not can always be secured. Brick partitions between the rooms, or a row of brick inside plaster walls on lath, probably serve to aid equalization of air by their porosity. These are matters for exact experiment. We can only speak of the indications of science as illustrated in the general laws of air circulation, and in view of some definite experiments already made. These, thus far, plainly call upon us to forsake the "impermeability" idea, and point us to investigation as to the degree of porosity demanded, and the methods by which it is best secured.

The roof inclosure, too, needs large attention, just because it is a part of inclosure, and involves the same general principles as are concerned in the other "walls." Its different inclination to air, sunlight and storm, must be studied, but not to the exclusion of those principles which apply to the porosity of the sides. Should not the rafters be so boarded and finished as to admit of the interposition of such material on the under-side as will properly graduate the entrance of air and heat? The roof of the Kirkbride Asylum, Philadelphia, is "slate fastened on lath, and plastered with hair mortar on the upper and under edges, and on the points of the slate." The suggestion made by Niernsee (p. 332), as to the use of cement concreting on the flooring directly under the roof for fire-proofing is more important for damp-proofing. A mason, however, has told me, that since the quick cement is used so much in place of lime and sand mortar, buildings are damper. We have been saved from the evils of every roof-inclosure in part by the fact, that the attic has usually been an open space, but with our mansard and round ceiling, and ridge finish, we have reason to study it as we do side-inclosure.

For the admission too of air, sunlight and heat, this part of the building admits of large utilization, and both in itself and in its apertures is a structure study. We would thus direct attention to the whole matter of building material and inclosure, as one upon which the opinion of any doctor who walks a ward and prescribes for patients is little worth, unless as a physicist he has made special study as to the play of physical forces on and through dead matter, and the laws by which structure modifies outside conditions. We would relegate the subject not to surgeons or architects or engineers, except so far as they may be medical or sanitary physicists. Because we understand dis-

cases and their laws, it is unfair to expect that by the general results of our treatment of hospital cases, and our sense of smell and inhalation, we should be able to decide as to the adaptability of different geological formations for inclosure. It may be well to get our general views, and suggestions as to the direction of inquiry and as to those points where our sciences approximate, but the experts in that line must come from a school of technology, and not from a medical institute.

The suggestions of our authors as to these parts of the inclosure are for the most part very practical. We think with Niernsee (p. 338), that the boxes and sashes of the windows can be made of cast iron at a small advance over the cost of hard-wood frames, and have the advantage of being less absorbent and fire-proof. Dr. Billings (p. 26) would not have a window to each bed, but would have them in three parts with square top and glazed with plated glass. Dr. Folsom has (p. 79) between the beds on three sides of the wards windows three feet wide, three feet from the floor, and ten feet high, the rooms being fourteen feet high at the wall, and finished to twenty feet at the centre. He has ordinary sashes below, "and the upper two feet, above a transom, having a sash hung on hinges at the bottom," opening inward and provided with sides so that the entering air is directed upward. It is suggested that all sashes be doubly glazed with an air-space between for non-conduction of heat. Dr. Jones (p. 116) says, "the windows in the wards should be numerous, opposite each other, and should reach from the ceiling to the floor. Dr. Morris (p. 202) opposes this last, but advocates double glazed windows, and inside-shutters for shade. Outside awnings of canvass are also suggested for summer, and the window-seats or sills are to be of polished slate. Dr. Smith (p. 300) has eight feet of wall space to each bed with a window four feet wide, the windows, on opposite sides alternating, with double sash for warmth in winter, and as a means of ventilation without currents, and extending to the floor. Morris (p. 338) advocates the double-sash window, double hung, the sashes being eight to twelve inches apart, and prefers this to the transom window of Folsom. Thus by opening the upper outer and the lower inner sash ventilation is secured without draught. When shut an air space and heat regulator is afforded. In the orphan home (p. 332), the windows on the north are double glazed, and revolving self-coiling shutters outside, take the place of Venetian blinds. The plan of Folsom as to windows with transom above, strikes us most favorably. Instead of the hood openings, Oppert (Hospital Infirmaries and Dispensaries, London, 1867) has perforated zinc plates at the upper part of the upper sash outside, which therefore, do not furnish a place for the lodgment of dust or organic matter. When the ceilings are rounded to twenty feet, as in his one-story structure, the windows should extend up to the side-ceiling, as suggested by Jones, but not to the floor (Jones & Morris). Doubled-sashed and doubled glazed windows tend to equalize temperature, but we are all along afraid lest the attempt to exclude draughts be carried so far as to impede air circulation. The double-sash if properly managed, however, is very available for regulating egress and ingress of air. Windows do far more for us as ventilators when shut, than they get credit for, and the variation in material from the rest of the inclosure is serviceable. We are constantly to bear in mind that the climate of Baltimore is not that of New England or Old England either. We prefer windows not quite so wide as four feet, and notwithstanding the reasons given by S., believe they are best opposite each other with full room for beds between.

The same objection which is made to corners or mouldings will apply to pulleys and cords, and window fastenings, and also to door-furniture, and especially keyholes, so that these must be so made as not to harbor organic matter, and admit of easy cleansing. We cannot with Dr. Morris approve inside slatted shutters for shade, but much prefer the outside revolving, self-coiling blinds of Mr. Niernsee. Doors and their casings need to be of hard wood, thoroughly plain and oiled or painted. In many cases a part of these may be of glass, and a transom overhead is frequently needed for ventilation.

The inside woodwork should be of hard-grained and oiled wood, closely jointed. All mouldings should be avoided, but when there is necessary projection, as over doors (Dr. Folsom), the lintel should slope away from the wall so as to be easily cleansed of dust. The directions of Dr. Morris (pp. 200–201) are excellent as to the floors, etc. The glazed tiles and oil-cloth of J. will not do. There are reasons for impermeable floors arising from horizontal position, and from their being the natural receptacles of the organic matter afloat. Even these must be impermeable only on the polished surface, and not so smooth as to be slippery. Corrugated glass, as now being prepared, has some claims for consideration here.

All corners should be rounded, and cement used for base board, as suggested by Dr. Morris (p. 200). But this too must be so smooth and painted as to admit of easy cleansing. If there is danger of breakage from movement of beds and furniture wainscoting finished to the windows may be used, if very carefully jointed. All cornices are to be avoided, and the ceilings are better rounded, so as to avoid corners, and they thus, in some degree by shape, favor diffusion and exchange of air. It is difficult to dispense entirely with shelving in wards, but whatever is needed in addition to the window sills should be of polished slate or glass, supported by smooth metal brackets, with a small interspace between the shelf and the wall.

With our present varieties of oils, varnishes, and colorings it is easy to suit painting inside and out to taste and health. The rules which guide should be

just those which philosophy furnishes, and should be governed by exposure, sunshine, etc. We would not, for instance, paint a summer-house black for the same reason that we would not wear our blackest cotton clothing in the tropics. We have the authority of Miss Nightingale so often quoted by our authors that the best wall now extant is oil-paint. It is smooth and easily cleansed, without being impervious of air any more than a painted board is. Zinc paints are generally to be preferred to lead inside.

House pipes enter so much into structure as to demand our next consideration.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, January 20, 1876.

DR. S. S. PURPLE, PRESIDENT, IN THE CHAIR.

ON THE CAUSES AND TREATMENT OF CASES OF UNUSUAL UTERINE HEMORRHAGE.

DR. H. T. HANKS read a paper upon the above subject, in which he confined himself to the consideration of those diseases most commonly attended with menorrhagia and metrorrhagia. After reviewing the well-known means for making a diagnosis, the doctor proceeded to notice the diseases in which hemorrhage from the uterus is more commonly a prominent symptom, and followed his remarks upon this part of the subject with a recital of illustrative cases. The more notable of these were the following:

Two cases of uterine fibroid, one sub-peritoneal, the other sub-mucus, which were treated by hypodermic injections of ergot with marked benefit. One case of endometritis terminating in retroversion, which was gradually relieved and cure finally effected by the use of the cotton tampon soaked in glycerine, following it the second or third day with an Albert Smith pessary. A case of granular erosion of the os and cervix was mentioned, which had been successfully treated by the local application of strong nitric acid, iodoform, and the use of the glycerized cotton. Objection was raised to the use of nitrate of silver in such cases, because of the liability to produce a condition which gives rise to sterility. A case of cancer was cited, in which hemorrhage became a dangerous symptom, and was controlled by the application of liq. ferri sesquichloride upon cotton twice a week.

The Doctor also made reference to several diseases in which menorrhagia is sometimes present, but does not form a prominent symptom, such as to demand the special interference of the physician. Among these were blood-poisoning, as from measles and scarlet fever, menorrhagia occurring with phthisis, pelvic cellulitis, and peritonitis, accompanied by slight metrorrhagia, etc., etc.

DR. PEASLEE, in commenting upon the subjects brought forward in the paper, mentioned two points in pathology which he regarded as very important. The first related to the development of retroflexion by endometritis. He was of the opinion that probably not one in five hundred cases of retroflexion of the uterus had an antecedent history of endometritis. Further, he was of the opinion that endometritis cannot produce displacement of the uterus, for the reason that the weight of the membrane, increased as much as it ever is when inflamed, is not sufficient to produce any effect whatever towards a displacement. If the two conditions are present at the same time, it is simply a coincidence. There may be present a hypertrophied condition of the endometrium, as a result of long-continued active congestion, and such a congestion may produce displacement, but not congestion simply of the endometrium. In order to produce retroflexion, if produced by increased weight of the organ, there must be an affection of something more than the endometrium, that is, of the parenchyma of the uterus. But we are now speaking of the effects of congestion and inflammation upon the endometrium.

The second point was with reference to the term granular erosion. There is no erosion whatever; and if there were an erosion, there is no granulation. It is simply a granular appearance, which has also been called ulceration. But there is no loss of substance from the part, except a mere desquamation of the epithelium. The granular appearance seen is due simply to hypertrophy of the normal papillæ of the part, which when normal are covered with epithelium which presents a smooth surface. When the papillæ become enlarged, the epithelium is lifted up, degenerates, and is swept away, leaving the papillæ bare. It is not erosion or granulation. As a rule, this condition is never found upon the cervix of a woman who has not been pregnant. It is characteristic of the woman who has been pregnant, and is difficult to cure unless thoroughly treated. The treatment the doctor recommended was to cut all these so-called granulations down level with the cutting curette, and then apply cotton, with or without glycerine, so that the raw surface shall not come in contact with opposing surfaces. The freshened surface heals in a short time, as a rule, unless another condition remains, namely, a basis of active congestion. If there is still remaining a surface in which the blood-vessels are distended, scarify that surface and remove the active congestion, and with it the cause of the growth and hypertrophy of the papillæ.

There is another class of cases, closely allied to those just mentioned, in which there is present a hypertrophy of the papillæ just within the os, and extending upwards one-eighth and perhaps one-fourth of an inch. This condition may be developed in the same manner as the other, but is almost invariably seen in the woman who has never been pregnant. The hypertrophy is sometimes so great, the mouth of the uterus is entirely closed by these growths. The method is the same as recommended in the other class of cases.

At this point the doctor spoke of scarification as the best possible means that can be employed to relieve uterine congestion. Leeches are used, but scarification is much more efficient, and can be readily performed in the cervix, and even the entire cavity of the uterus. It was maintained that the most certain method of relieving a patient of membranous dysmenorrhœa, is to so relieve the internal surface of the uterus of congestion by scarification that it cannot get this membranous growth.

The cotton and glycerine is an excellent application for the relief of local congestions, and he constantly resorts to it in anæmic persons; but its effects are small as compared with those obtained by scarification.

Dr. Peaslee then referred to carcinoma uteri, but to that class of cases only in which hemorrhage becomes an alarming symptom.

To arrest the hemorrhage the persulphate of iron is

a useful preparation, if a simple styptic is desired. His method of treatment, however, was to remove every portion of the fungous growth with a cutting curette, down to the scirrhous base below.

If the woman has already lost considerable blood, and is anæmic, it is best to resort to this procedure, for a fatal hemorrhage may attend any delay, and if the parts are well exposed and the fungus removed quickly, as a rule, severe hemorrhage does not attend the operation. If the scirrhous tissue below is cut through, a profuse hemorrhage will follow, but if only the fungous growth above the scirrhous base is swept away, not much hemorrhage will be produced. This operation will arrest the growth of these little fungous projections for a time, and if regularly repeated, perhaps every two or three weeks, it will check the progress of the disease, and the life of the patient may be prolonged for one year or more. An illustrative case was related, in which the patient's life was prolonged for a year, and when death did occur it was not from hemorrhage or septicæmia, but from a gradual failure of vital power.

(The remarks of Dr. Barker can be found on page 65.)

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, Jan. 7, 1876.

DR. F. P. FOSTER, VICE-PRESIDENT, IN THE CHAIR.

ALOPECIA AREATA.

DR. H. G. PIFFARD read a paper upon the above subject, in which he gave a brief history of the affection, embracing its clinical manifestations, its causation, and its treatment. The name has usually been applied to circumscribed spots of baldness occurring upon the scalp, but the beard may be affected in the same manner, and also every hairy spot upon the body. The hairs fall out by the roots and do not break off close to the scalp. In some instances the baldness is permanent, and upon the other hand, a new growth of hair is sometimes spontaneous. It does not occur in advanced life, and is unassociated with any special internal derangement. Some have claimed that it is a parasitic affection, others that it is non parasitic. The doctor referred to reports of cases where the observations were thought to point strongly to contagion as a means of its propagation, and also mentioned the possible relation existing between alopecia areata and cases grouped under the common term ring-worm. Five cases were reported, which were regarded as sufficiently suggestive to keep us alive to the possibility of a closer relationship than has hitherto been suspected. Dr. Piffard has been unable to find the spores described by those who claim that alopecia areata is a parasitic affection; but he brought forward the idea that there was possibly a localized fatty degeneration at the points of bulging seen along the shafts of the hairs. It is possible that what have been heretofore regarded as spores were no more nor less than particles of fat. The treatment recommended was epilation of the hairs at the margin of the affected spot, followed by blisters and by stimulating applications, such as ointment of turpeth mineral, as soon as the blistered surface has healed. It may be necessary to repeat the epilation and blisters. A cure is usually effected in from two to four months.

DR. KEYES remarked that he had never been able to find any spores in this affection, and looks for a return of the hair at any time within two years. If the spot remains bald for a longer time the hair is usually never restored. His treatment has consisted in the internal use of arsenic, iron, and phosphorus, the external use of stimulant applications, varying in strength according to the sensitiveness of the patient, and in some cases the induced current was thought to have exerted a beneficial influence.

DR. BULKLEY regarded the disease as non parasitic. He had used equal parts of tinct. of capsicum and glycerine as a local application, and with good success. Arsenic is usually employed internally. He regards it as a neurotic affection, but did not regard electricity as a specially serviceable agent in its treatment.

DR. STURGIS referred to a case in which the disease was apparently due to syphilis, and disappeared while the patient was taking anti-syphilitic remedies.

DR. BULKLEY referred to a similar case.

DR. KEYES referred to a case where the disease was present in a patient supposed to be syphilitic, but he was of the opinion that the patient did not have syphilis.

DR. R. W. TAYLOR remarked that he had not been able to associate the disease with syphilis. He had seen cases in patients as young as four and as old as fifty-two years of age. A change in the stimulant application used he regarded as being better than the use of one remedy continuously. Electricity combined with these may probably be of benefit.

DR. FOX regarded the affection as a neurosis.

DR. PIFFARD remarked that the conflicting opinions of different observers did not permit us to form any definite idea regarding the true nature of the disease. It is altogether probable that the fatty degeneration, to which he had referred as possibly being present in the hair, is a result and not a cause, and it is necessary, therefore, to cast about for an explanation of this change.

DR. F. P. FOSTER regarded it as quite possible for a ring-worm of the scalp to cause by reflex action, a true alopecia areata at a different part of the surface from that affected by the parasitic disease. In such case, the parasite would be found upon the hairs taken from the surface affected by the parasitic disease, and not upon the hairs taken from the surface affected by the alopecia areata. A parasitic *skin* disease would be more likely to produce a reflex disease affecting the skin than would a disease of some other structure of the body.

FEVER IN ROME.—*The Lancet* says that it appears from the returns of the Registrar-General that the annual death-rate in Rome, during the six weeks ending November 14th, was equal to thirty-seven per thousand. One hundred and eighty-three of the deaths during that period occurred among strangers and non-residents. The principal feature in the recent Roman returns has been a marked increase in the fatal cases of fever, which, during the six weeks under notice, have numbered no less than 220, equal to an annual death-rate of 7.5 per 1,000. During the last of these six weeks the deaths referred to fever in Rome were fifty two, a considerably higher number than in any previous week this year, and included twenty-nine described as "eruptive," ten as "febbre d'assorbimento," seven as intermittent, and six as typhoid. Considering the number of strangers who spend several weeks of the winter season in Rome, the sanitary condition of the place is not so good as could be desired.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, December 22, 1875.

DR. F. DELAFIELD, PRESIDENT, IN THE CHAIR.

(Continued from page 61.)

A CASE OF PERITYPHLITIS WITHOUT A DIAGNOSIS.

DR. DELAFIELD presented a portion of the colon, to which belonged a long history, yet a history of considerable interest, from the variety of diagnoses which were made, none of which were confirmed by the post-mortem.

The patient was a woman, thirty-nine years of age, who was admitted to Roosevelt Hospital Oct. 1, 1873. She said that she had been perfectly well until two months before that time, when she was suddenly seized with vomiting. This vomiting soon passed away, when she felt well until the next evening, when she vomited again. It again ceased in a few minutes, and recurred the next evening, lasting as before only a few minutes.

A few days after this she began to menstruate, it being her regular period. The discharge, instead of ceasing as usual, continued for three weeks, and during this time she lost a good deal of blood. During this time she had pain in the lower part of the abdomen in front, not constant nor severe, but it ceased with the termination of menstruation.

She continued to feel perfectly well until the first of September, when she was again seized with vomiting, and the vomiting continued during the day. At the same she had several slight chills during the day. This condition lasted for a week. The next week the vomiting ceased, she had no more chills, and was able to do her work during the morning, but in the afternoon there was nausea and lassitude. This condition continued up to five days before she entered the hospital. At that time she was seized with very great pain, tenderness, and swelling of the abdomen. She had been taking laxative medicines, and her bowels had moved several times. She would occasionally vomit during the day.

At the time of admission the vomiting had ceased, and the patient complained of severe pain and tenderness in the iliac and epigastric regions, and extending backwards. There was some redness of the skin, and a slight swelling in the right lumbar region. Her face was flushed, pulse 120, temperature 102° F., and respiration 36.

After her admission her general condition improved. Her vomiting was better, and her bowels were disposed to be loose. This looseness was controlled, and there was nothing special complained of but occasional vomiting, except that she had night-sweats.

On the 11th of October it was noted that the pain was more severe, and that a hard lump could be felt under the liver on right side. On deep pressure the pain seems to be very great, and yet when she lay upon the painful side of the abdomen the pain was relieved. On Oct. 18th she had signs of bronchitis—cough, expectoration, and night-sweats. Tenderness on pressure over right side still continues.

On Oct. 28th it was supposed that she was suffering from fecal impaction, and her bowels were pretty freely moved with purgatives, without any particular effect upon her condition. This was the first diagnosis.

Nov. 20th. There was a good deal of tenderness over the right kidney, and with the stethoscope there was heard a double murmur, which was limited to the right side of the spinal column, above the tenth rib. It was then supposed that there was an aneurism of the abdominal aorta, and this was the second diagnosis.

Nov. 22d. The same murmur was heard distinctly again.

Nov. 29. Her legs became swollen, particularly the left leg, and she had all the symptoms of thrombosis of the left femoral vein.

Dec. 2. She was examined by Dr. Draper, who suspected that there was abscess in the abdominal cavity, and that the abscess was probably due to the existence of caries of the spine, and this was the third diagnosis.

Dec. 8. It was noted that there was a soft tumor on the right side, at the level of the left edge of the kidney and external to it. The fluctuation was not very distinct. This swelling she said she noticed for the first time the day before (Dec. 7)

Dec. 9. Tumor has increased in size, and fluctuation is distinct. Urine normal.

Dec. 10. Was examined by Dr. Mason, who recognized the existence of pus in the lumbar region, and supposed it to be a post-renal abscess, the result of perinephritis. After this time the woman's general condition became improved.

Dec. 17. It was noted that the tumor, pressed upon from behind, produced gurgling in the abdomen, which could be felt in front, and finally the fluctuation and tumor disappeared. It was then supposed that the abscess had discharged its contents into the gut.

Dec. 27. She complained of pain and tenderness over the ileum, near the anterior superior spinous process, and here somewhat later fluctuation made its appearance, and an abscess opened.

Jan. 7, 1875. She was seen by Dr. Sands, who also supposed that she suffered from caries of the spine, that the abscess was the result of this, but he advised that the abscess should not be opened.

Feb. 21. She was seen by Dr. SCHAFFER in consultation, who likewise supposed the abscess secondary to caries of the vertebra, and advised aspiration. Dr. Weir also saw her at the same time, and concurred in the diagnosis and treatment proposed. The abscess was accordingly aspirated, and the swelling disappeared.

March 12. The tumor in the lumbar region returned, and opened spontaneously and discharged pus pretty freely. A little later a similar opening over the crest of the ileum, discharging pus. These openings were kept open and regularly washed out, when it was found that solutions injected into the opening by Poupart's ligament would flow freely from the one in the lumbar region.

At this time her fæces were examined, and pus having been found in them, it became evident that a communication had been made with the intestine.

Sept. 1. She was seen by Dr. Thomson, who made the diagnosis of perihepatitis resulting in abscess, the abscess communicating with the lung and the intestine. This was a further difference of opinion.

After this the patient progressed sometimes better and sometimes worse until within the last few months, when the abscess had entirely ceased discharging, and at the time of her death the external opening had almost entirely healed up. At the time of her death the symptoms which she complained of were those of phthisis, which had been developed within the last few months.

At the autopsy the brain was not examined. The upper lobes of both lungs presented the lesions of chronic disease, and in the apex of the right was a moderate-sized cavity. The heart was the subject of brown atrophy. The liver was somewhat increased in

size, and was in a condition of waxy infiltration. The kidneys were slightly increased in size, and had also waxy infiltration. In the peritoneal cavity was a large amount of clear serum, and the peritoneum lining the abdominal wall was somewhat thickened and roughened with little nodules, but there was no fibrine and no adhesions. The stomach was normal. The small intestines were in a condition of chronic catarrhal inflammation, with here and there a small superficial ulcer. The caput coli was firmly adherent behind to the posterior abdominal wall, and in this posterior portion of the gut was an opening capable of admitting the end of the little finger. This opening led directly into a very small cavity in the tissues beneath. This cavity was very small indeed, and was empty. Leading into this cavity were a number of narrow, flat sinuses, leading from these points beneath the caput coli to the old external openings. These sinuses were small and contracted, and contained no pus. All about them there was a considerable amount of dense cicatricial connective tissue, extending from the point of adhesion of the colon up to the lower end of the right kidney, and partly embracing it. That portion of the capsule of the right kidney was thickened, but the kidney itself presented no lesion but waxy degeneration.

At the time of death, then, the patient had entirely recovered from the original disease. The cavities had closed, as was virtually the case with the hole in the intestine. The caput coli, by the way, showed no other lesion save the perforation. The case seemed to have been one of perityphlitis, the abscess forming behind the caput coli. Whether originating in an inflammation and perforation of the caput coli, or originating as a phlegmonous inflammation of the connective tissue beneath the caput coli, neither the history nor the autopsy seemed to show. It seemed curious that the patient, after having been under observation so long, and having been seen by so many, a correct diagnosis was not made. Dr. Delafield made no diagnosis at all, and was beyond criticism.

Dr. Post exhibited two recurrent tumors which he had removed from the lower part of the right arm of a young man, aged 30 years. They were recurrent growths, making their appearance about two years after the first operation. They were situated near the lower extremity of the arm; one on the outer side, about a hand's breadth above the elbow; the other posteriorly, and a little below that level. They involved the muscular tissues of the limb, but the skin was movable over them and there were no glandular enlargements. The muscles involved in the growths were the triceps, the outer part of the brachialis anticus, and a portion of the supinator longus. All of the tissues of these muscles involved in the disease were removed with it. The operation was performed in this manner with a view of saving the limb, in lieu of an amputation, which was at first proposed.

The second specimen presented by Dr. Post was a tubular sequestrum, removed by operation from the popliteal region of the femur of a girl, seven years of age, who had suffered from osteo-myelitis of that part. The specimen was presented as a rare one of its kind.

The Society then went into executive session.

Religious Excitement.—The number of the *Medical and Surgical Journal* (Philadelphia) for January 22d contains a very readable and excellently written editorial on the "Physiological Aspects of Religious Excitement."

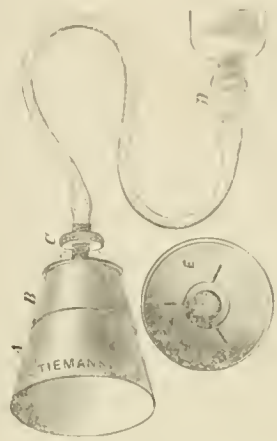
New Instruments.

A NEW APPARATUS FOR ETHER.

By W. CHEATHAM, M.D.,

NEW YORK.

I wish to call the attention of the profession to a new apparatus I have had made by Messrs. Stohlmann, Pfarre & Co., of 107 E. 28th street, New York, for the administration of ether. It operates by Lente's method of replenishing the evaporating surface without removing it from the face.



A patient cannot be anæsthetized as quickly with it as with a common cone, but with much less ether. It economizes by not having to remove it from the face to replenish it, and by this you avoid the disagreeable effect of having the ether that would otherwise escape permeating every part of the house in which it is used. Its convenience of application is also quite obvious. The ease with which the face-piece (being paper) can be removed immediately after use and thrown away is, I think, a strong recommendation in its favor.

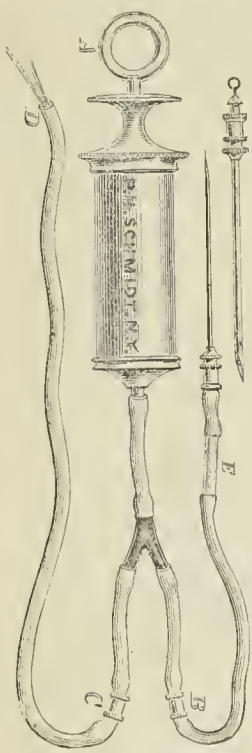
The apparatus consists of a tin cup (A), holding in the inside a sponge as an evaporating surface, and connected from the top by rubber tubing with the bottle that contains the anæsthetic. This tube has attached to its distal end a cap (D) that will fit over the neck of almost any bottle, doing away with Lente's graduated bottle.

Make a cone of paper, cut the top off, so when tin cup (A) is slipped inside the top of the cup will protrude a line or two from top of cone.

Place tin cup (B) over both cup and cone, screw it down tightly by means of nut (C), and you have the cone held tightly. Attach tube to top of cup, and the apparatus is complete. The smaller the cone the quicker you can get the patient under the influence of the anæsthetic. I would suggest after the cone is in position the bottom should be trimmed, leaving a part of it—we shall call it the back part—that is intended to go over the chin, three inches longer than the cup, and sloping forwards and upwards, leaving the front part, intended to go over the nose, about an inch longer than cup. E gives an inside view of cup (A).

DR. F. N. OTIS'S SIMPLIFIED ASPIRATOR.

The accompanying engraving represents a simple instrument, the original of which was extemporized from materials within the easy reach of every surgeon, and so combined as to form an *Aspirator*, complete and efficient for all ordinary purposes.



The "Simplified Aspirator" consists of an ordinary well-fitted syringe (A) of any convenient size, joined to which, by an inch of rubber tubing, is a short hard-rubber, metal, or glass bifurcating tube. To each arm of this tube is attached another bit of rubber tubing, which terminates in a hard rubber valve, such as is used in the construction of the Davidson syringe. These valves are arranged to work in reverse directions. On retraction of the piston of the syringe, the valve at B (connected by tubing with the aspirating needle) opens and permits access through the needle to the barrel of the syringe. The piston being driven back the valve at B closes, while that at C opens and empties the syringe through the connecting discharge pipe. Near the base of the needle a short glass tube is inserted in order to afford early information of the character of the fluid in process of evacuation. "The Simplified Aspirator" was the result of a necessity for an instrument sufficiently small to fit in my "retention case," and a one-ounce hard-rubber syringe was found to be sufficiently large for easy aspiration of the bladder. In an emergency it might be used for transfusion, simply by adapting a small canula to the discharge pipe. This instrument has been duplicated by Mr. Schmidt, the surgical-instrument maker, corner Thirty-fourth street and Broadway, and is put up in a case with two sizes of aspiration needles, for nearly one-third the price of an ordinary aspirator of the cheapest description.

F. N. Otis, M.D.

108 West 34th Street.

CHANGES IN THE PUBLIC SERVICE.

ARMY.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from Jan. 16th to Jan. 22d, 1876.

Taylor, M. E., Assistant Surgeon.—Assigned to duty at the Post of McComb City, Miss. S. O. 9, Dept. of the Gulf, Jan. 14, 1876.

Epileptic and Paralytic Hospital.—Dr. L. D. Bulkley has been appointed by the Commissioners of Public Charities and Correction Visiting Physician to the Epileptic and Paralytic Hospital, Blackwell's Island, *vice* Dr. E. C. Seguin, resigned.

Medical Items and News.

New York Orthopedic Dispensary.—At the annual meeting of the Board of Trustees Jan. 10th, the following Medical Board was elected for the ensuing year:—

Consulting Surgeons: Drs. F. H. Hamilton, T. M. Markoe, Henry B. Sands, Stephen Smith, and William H. Van Buren. *Consulting Physicians:* Drs. William H. Draper, A. Jacobi, and John T. Metcalfe. *Consulting Orthopædic Surgeon:* Dr. C. Fayette Taylor. *Consulting Oculist:* Dr. C. R. Agnew. *Consultant on Nervous Diseases:* Dr. E. C. Seguin.

Attending Surgeons: Drs. John G. Curtis, George A. Peters, Thomas T. Sabine, and Newton M. Shaffer.

Orthopædic Surgeon: Dr. Newton M. Shaffer.

Assistant Surgeons: Drs. S. A. Foster, George B. Packard, and A. B. Judson.

The Canadian Journal of Medical Science is a new monthly quarto of thirty-two pages, in the style of the *Canada Lancet* and *Canadian Medical Record*. Uzziel Ogden, M.D., Lecturer on Midwifery and Diseases of Women and Children, in the Toronto School of Medicine, is the Editor; and R. Zimmerman, M.B., L.R.C.P. Lond., Demonstrator of Microscopical Anatomy in the same school, is the Corresponding Editor. The volume commences with the year, and the subscription price is three dollars.

Kings County Medical Society.—At the last annual meeting the following gentlemen were elected for the ensuing year:—Alexander Hutchins, M.D., President; J. S. Prout, M.D., Vice-President; R. M. Wyckoff, M.D., Secretary; J. D. Rushmore, M.D., Assistant Secretary; G. G. Hopkins, M.D., Treasurer; W. W. Reese, M.D., Librarian; Doctors Baker, Buell, Burge, Jewett, and Matthewson, Censors.

Medical Society of State of New York.—No legislative action having been taken in regard to changing the time of meeting of the Society, it is proposed that a sufficient number of members in Albany and its vicinity shall meet at the regular time, organize, and then, without transacting any business, adjourn until June next.

Medical Legislation.—The *Canada Medical Record* is much exercised concerning a prospective "Act concerning the Medical Profession of the Province of Quebec." Like all other bills of its kind, it is said to be exceedingly impracticable, and "utterly impossible of accomplishment;"—the same old story.

Presbyterian Hospital.—Drs. C. K. Briddon, John H. Hinton, and L. A. Stimson have been appointed attending surgeons.

Scarlet Fever; Two Attacks in One Patient within Two Months.—A correspondent of the London *Lancet*, of January 8th, reports a case of the above.

The Louisville Medical News is a very sprightly readable journal, but Dr. Cowling, its editor, is not yet sound on the patent-medicine question. We believe he is yet open to conviction.

Weekly Bulletin of the Meetings of Medical Societies.

Tuesday, Feb. 1.—New York Obstetrical Society; New York Dermatological Society.

Thursday, Feb. 3.—New York Academy of Medicine, 16 W. 31st.

Friday, Feb. 4.—N. Y. Medical Journal Association

Original Communication.

OSTEO-ANEURISM OF THE INFERIOR MAXILLA.

LIGATURE OF THE LEFT EXTERNAL CAROTID AND RIGHT COMMON CAROTID ARTERIES.

(Being a report upon specimens presented at the meeting of the New York Pathological Society, January 12, 1876.)

By EUGENE PEUGNET, M.D.,

FORDHAM HEIGHTS, NEW YORK.

CAROLINE M., 13 years and 10 months of age, was of healthy parents and of a naturally good and robust temperament. At about the age of 12 years her second inferior molar on left side made its appearance, and since that time she complained of more or less pain in the vicinity of that tooth. The left cheek began to swell at about the same time. On the mornings of the 31st of May, 1st, 2d, and 3d of June, 1874, her mother observed that the upper portion of her night-dress was considerably blood-stained. On the third of June, at about three in the afternoon, whilst in the act of washing her face, was suddenly taken with an alarming hemorrhage from the mouth, which only ceased with the occurrence of syncope. The hemorrhage recurred twice in the succeeding 36 hours. This was pronounced vicarious menstruation, as the patient had never had her menses since their first appearance in September, 1874, and the attending physician only prescribed lemonade as a drink.

On the 9th day of June the patient was removed from Williamsburg to her aunt's residence at Tremont, was then placed on a course of quinine and iron, with a generous diet. Although she recuperated rapidly, her left cheek did not diminish in size, but appeared to gradually increase, and the superficial veins became more prominent. Now and then she would complain of a pulsating pain extending from the chin along the ramus of the maxilla up to the left temporal region, which was controlled by sulphate of morphine in doses of ¼ of a grain. On the 3d day of July, early in the morning, before rising, was suddenly taken with an arterial hemorrhage from the mouth, arising from the vicinity of second inferior molar tooth of left side, which, after the loss of over two pints of blood, was arrested by the application of a compress of lint saturated with the perchloride of iron over left molar tooth. On the 4th and 5th the hemorrhage recurred twice, in each instance caused by the removal of the styptic compress.

On the 5th of July Dr. J. W. Hupfeld requested me to see her. I then found her remarkably exsanguine—with a pulse of 120, temperature about normal—complaining of a throbbing pain from the mental symphysis up to the left temporal region, an aneurismal thrill and bruit extending from the left supra-clavicular region, along the course of the carotid and temporal arteries, also of the facial and left mental. The superficial veins markedly developed. Owing to the instantaneous recurrence of the hemorrhage at the slightest attempt to open the mouth sufficiently, it was impossible to make a thorough examination within it. From the cursory examination thus made I pronounced it a cirsoid aneurism, and therefore advised ligation of the common carotid. In the meantime placed a compress over left facial and mental arteries, which controlled the throbbing pain, and gave the patient rest. Dr. Erskine Mason saw her on the 12th of July, confirmed the diagnosis, and advised ligation of the common carotid.

On the 16th of July, with the assistance of Dr. Henry B. Sands, and in the presence of Drs. J. C. Peters, Bathgate, Naudain, A. M. Campbell, Goodwillie and Hupfeld, I proceeded to ligate the left external carotid. It had been my intention to ligate the common carotid, especially as I had occasion to tie it on a previous occasion for secondary hemorrhage from the internal maxillary;* but the advice of Dr. Sands, as well as the cogent argument of Dr. Landon R. Langworth, in his able thesis on the ligature of the external carotid artery,† led me to alter my purpose and to ligate the latter artery. I made the usual incision for the ligature of the common carotid, along the anterior margin of the sterno-cleido-mastoid muscle, downwards two inches and a half. In the superficial fascia an enlarged facial vein was isolated, ligated and divided, the incision through the platysma myodes and deep fascia brought the sheath of the vessels and descendens noni clearly into view. I then opened the sheath and exposed the internal carotid, which was at first thought to be the external, as its compression arrested the pulsation in the facial and temporal, but in isolating it the error was discovered; the bifurcation was then sought for, but as it was evidently concealed by the bifurcation of the abnormally large facial vein and internal jugular, I passed a silk thread around the latter, with which Dr. Sands drew it cautiously to one side, thus exposing the arterial bifurcation. I then isolated the external carotid, which laid almost beneath the internal, thus accounting for the arrest of pulsation in the branches of the former, when the latter was compressed, and ligated it about 5 lines above the bifurcation. No other vessels were ligated, and the wound was brought together by 5 sutures. The operation, including the administration of ether, occupied 60 minutes.

10 P.M., P. 90; patient comfortable, no pain; left molar tooth loose; 11.30 P.M., P. 100.

July 17th, 7 A.M., P. 100; 6 P.M., P. 102. 18th, 7 A.M., P. 90, as the wound had united by first intention, I removed three of the sutures; 6 P.M., P. 100, patient wiped some blood, mixed with pus, from her mouth. 21st, 7 A.M., P. 112, spat considerable blood, and complained for the *first time* since the operation of pain in molar tooth; both were relieved by washing the mouth with ice water; 6 P.M., P. 100. 22d, 7 A.M., P. 98; 6 P.M., P. 100; 10 P.M., patient awakens, spits out some dark-looking clotted blood, and complains of intense pain in left tooth and cheek; ice water in mouth relieved her at once. 23d, 7 A.M., P. 90, slight hemorrhage from mouth; 6 P.M., P. 98. 24th, 7 A.M., P. 102; 12.30 P.M., a sudden arterial hemorrhage from wound in neck, which, after the loss of twelve or fourteen ounces of blood, was finally arrested by Dr. A. M. Campbell, who compressed the common carotid; at 3 P.M. I found the patient anxious but comfortable, P. 120; the common and internal carotids of left side pulsating with considerable force. 3.20 P.M., P. 126, administered tinct. veratrum viride gtt. v., and tinct. digitalis gtt. x.; 6.30 P.M., P. 98; 7.08 P.M., P. 100, administered tinct. v. v. gtt. v., tinct. d. gtt. x.; 9.25 P.M., P. 78, sleeping quietly; 10.25 P.M., P. 78; 10.35, P. 102, awakens; 10.40

* On the 21st of July, 1861, at the battle of Bull Run a private of Company F, 71st Regiment N. Y. S. M., received a gun-shot wound of the face, the missile entering the antrum on left side. On the 24th a severe hemorrhage from wound, again on the 25th and 27th, which could only be checked by compression of the common carotid on left side. On the latter date, with the assistance of Drs. G. S. Winston and C. Degraw, I ligated the left common carotid. 18 hours after the patient was removed from Sudley Church to Manassas, where Dr. Chopin kept him under observation for two days, then sent him to Richmond, there he sank into a typhoid condition, and died on the 11th day, at least so I was informed by Dr. White, of the 1st Rhode Island Vols.

† Dr. Brown Sequard's "Arch. of Scient. and Pract. Medicine," No. 5, 1873.

P.M., a sudden flow of blood from wound in neck, which I immediately arrested by compressing the common carotid, then applied a graduated rubber compress over carotid in supra-clavicular region; 10.55 P.M., P. 114, administered morphiæ sulph. gr. ¼, tinct. v. v. gtt. v., tinct. d. gtt. x.; 11.20 P.M., P. 108; 11.50 P.M., P. 86; 12 M., P. 82.

July 25th, 12.30 A.M., P. 94, administered tinct. v. v. gtt. v., tinct. d. gtt. x.; 1.20 A.M., P. 89; 4.10 A.M., P. 92, administered tinct. v. v. gtt. v., tinct. d. gtt. x.; 5.35 A.M., P. 95; 7.15 A.M., P. 66, sleeping quietly; 8 A.M., P. 66; 9 A.M., P. 72; 9.46 A.M., P. 82, administered tinct. v. v., tinct. d., āā gtt. v.; 11.25 A.M., P. 93, administered tinct. v. v., tinct. d., āā gtt. v.; 1.30 P.M., P. 80; 2.20 P.M., P. 77; 4 P.M., P. 120, not having urinated in twenty hours, twelve ounces of urine were drawn off with catheter; 4.10 P.M., P. 106, slight arterial hemorrhage from mouth, also sanguineo-purulent discharge from seat of ligature; administered tinct. v. v., tinct. d., āā gtt. v.; 5 P.M., P. 100; 6 P.M., P. 90, T. 102°; 7.12 P.M., P. 88, administered tinct. v. v., tinct. d., āā gtt. vj.; 10.48 P.M., P. 88, slight hemorrhage from wound in neck, immediately controlled by pressure on compress; 11.33 P.M., P. 93, owing to compression of carotid complains of considerable pain; very restless, administered morph. sulph. gr. ¼.

July 26th, 1.35 A.M., P. 78, administered tinct. v. v., tinct. d., āā gtt. vj.; 4.25 A.M., P. 72, sleeping quietly; 5.36 A.M., P. 72, T. 99; 5.35 A.M., P. 80, administered tinct. v. v., tinct. d., āā gtt. vj.; 6.35 A.M., P. 67; 7.55 A.M., P. 65, nausea and slight vomiting of viscid mucus; 8.50 A.M., P. 60, nausea and vomiting; 9.45 A.M., P. 60; 10.35 A.M., P. 64; 12.15 P.M., P. 74; 2.25 P.M., P. 96, administered tinct. v. v., tinct. d., āā gtt. vj.; 3.10 P.M., P. 88; 4.45 P.M., P. 78; 6 P.M., P. 72; 7 P.M., P. 80; 8.05 P.M., P. 78, complains of pain in tooth; 9 P.M., P. 100, pain continues; administered tinct. v. v., tinct. d., āā gtt. vj.; 10.40 P.M., P. 80, still complains of pain.

July 27th, 12.30 A.M., P. 80, pain in tooth; 1.15 A.M., P. 72, complains of pain in tooth, very restless; administered morph. sulph. gr. ¼; 3.10 A.M., P. 70, sleeping quietly; 6 A.M., P. 80, no pain; 6.45 A.M., P. 100, administered tinct. v. v., tinct. d., āā gtt. vj.; 7.45 A.M., P. 88; 8.55 A.M., P. 80; 9.20 A.M., P. 85; 10.20 A.M., P. 77; 12.30 P.M., P. 79; 3 P.M., P. 82; 4.50 P.M., P. 96, administered tinct. v. v., tinct. d., āā gtt. vj.; 5.55 P.M., P. 98; 7.10 P.M., P. 92, bowels move freely; 9 P.M., P. 90, marked pulsation in common and internal carotids, pain in tooth; administered tinct. ferri mur. gtt. x.; 9.55 P.M., P. 100; 11 P.M., P. 89.

July 28th, 12.10 A.M., P. 90, anxious and restless; administered morph. sulph. gr. ¼. 2 A.M., awakened suddenly with arterial hemorrhage from mouth, which *compression* of the *left common carotid failed to arrest*, but was instantaneously arrested by plug of lint, saturated with the persulphate of iron, over molar tooth; administered tinct. v. v., tinct. d., āā gtt. vj. 3 A.M., P. 111; 7.55 A.M., P. 112; 10.20 A.M., apprehending further hemorrhage, and the patient having been anæsthetized with ether by Dr. A. M. Campbell, I proceeded, with the assistance of Dr. H. B. Sands, and in the presence of Drs. Bathgate, Naudain, and Hupfeld, to ligate the right external carotid. The dangerous obstacles, as well as the unusually high bifurcation met with on left side, led me, with the concurrence of Dr. Sands, to modify the operation. Therefore adopting one somewhat similar to that of Malgaigne for ligation of the lingual, began my incision at a point half an inch above the angle of the inferior maxilla, opposite the lobe of the ear, carried it obliquely downwards two and a half inches, to a point midway between the sterno-cleido-mastoid and the vertical ridge of the hyoid bone, thus exposing the upper half of the superior carotid triangle, bounded behind by the anterior margin of the sterno-cleido-mastoid, anteriorly by the stylo-hyoid and posterior belly of the digastricus muscles, below by the greater cornu of the hyoid bone. This brought clearly into view the external carotid and superior thyroid arteries, the latter passing over the greater cornu of the hyoid bone, also the thyroid vein. Neither the jugular vein, internal carotid artery, nor any nerve, not even the lingual, was observed. I then passed a ligature around the external carotid about two lines below the thyroid, also one around the superior thyroid about three lines from its origin, both immediately below the digastricus and stylo-hyoid muscles, the insertion of the tendon of the latter muscle being distinctly observable. The wound was then brought together by four sutures and the plug removed from over molar tooth, and gtt. xxv. of aromatic spirits of ammonia administered; the whole operation, including anæsthesia, having occupied thirty minutes. 10.50 A.M., P. 98; 11.15 A.M., P. 80, administered sp. amm. arom. gtt. xxv.; 12.45 P.M., P. 110, T. 99½°, administered tinct. ferri mur. gtt. x.; 3.25 P.M., P. 105; 5.18 P.M., P. 118, administered tinct. v. v., tinct. d., āā gtt. vj.; 7 P.M., P. 102, administered tinct. ferri mur. gtt. x.; 11.15 P.M., P. 105, administered tinct. v. v., tinct. d., āā gtt. vj.

July 29th, 2.30 A.M., P. 100, administered tinct. ferri mur. gtt. x.; 4.05 A.M., P. 100, 6 A.M., P. 100; 8 A.M., P. 100, administered tinct. ferri mur. gtt. x.; 11.30 A.M., P. 108, administered tinct. v. v., tinct. d., āā gtt. vj.; 1 P.M., P. 108, administered tinct. ferri mur. gtt. x.; 5 P.M., P. 105, administered tinct. ferri mur. gtt. x.; 9 P.M., P. 99, administered tinct. ferri mur. gtt. x.; 10.15 P.M., P. 106; 12 M., P. 90, suddenly slight hemorrhage from mouth, which was spontaneously arrested; very nervous and anxious, administered morph. sulph. gr. ¼.

July 30th, 1 A.M., P. 90, administered tinct. ferri mur. gtt. x.; 5 A.M., P. 90, administered tinct. ferri mur. gtt. x.; 9 A.M., P. 104, slight sanguineo-purulent discharge from the mouth, administered tinct. ferri mur. gtt. x.; 9.30 A.M., P. 104, administered tinct. v. v., tinct. d. āā gtt. vj.; 11.45 A.M., P. 104; complains of intense pain in lower jaw, relieved by *compressing* the *left* common *carotid;* 12.05 P.M., P. 106; administered tinct. v. v., tinct. d., āā gtt. vj.; 1.25 P.M., P. 93; 3 P.M., as there had been an almost continuous oozing of blood from mouth since 9 A.M., I determined to make a further attempt to ascertain the exact seat of the hemorrhage, and to adopt such further measures as should be deemed advisable. The patient having accordingly been anæsthetized by Dr. A. M. Campbell, and the right common carotid compressed by Dr. Purroy, whilst I compressed the left one in order to *control* the *circulation* through the *internal carotids* and their *ophthalmic* branch, Dr. G. H. Goodwillie attempted to make an examination of the mouth. The doctor had barely opened the patient's mouth, and was about removing the plug of lint from over molar tooth, when the blood gushed *per saltum*, notwithstanding firm compression by the doctor over molar, which sank in the socket. Without exception it was the most appalling sight it has been my misfortune to meet with. The patient sank rapidly, and expired at 5 P.M.

Autopsy, twenty-three hours after death, made by Dr. A. M. Campbell: Rigor mortis well marked; body

well nourished. External incision on left side of neck, two and a half inches in length, united, excepting at two points; the ligature *in situ*. Incision on right side of neck, two and a half inches in length, united, excepting at points of egress of the ligatures around carotid and thyroid arteries. On opening the thoracic cavity, the lungs were found to be pale and exsanguine, with but slight hypostatic congestion, the heart empty and normal. I then threw an injection of melted wax, colored with cochineal, into the innominata artery, on the completion of which Dr. Campbell proceeded with the autopsy. Scalp bloodless, serous effusion beneath meninges, brain otherwise normal. The vertebral arteries and circle of Willis injected with wax, the left internal carotid also; the *right internal carotid* at *first supposed* to be *empty*, was *wanting*. The two vertebral and basilar quite large. The *left* posterior communicating *wanting*. The two

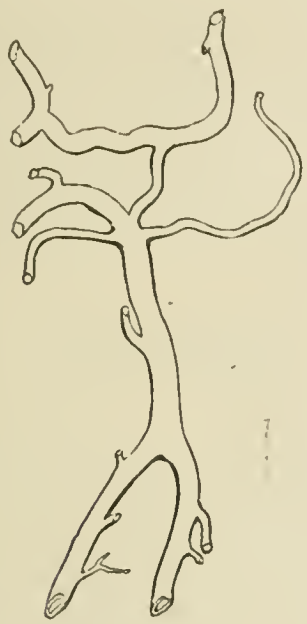


Fig. 1.

anterior cerebral springing off from the right posterior communicating forming an arch, the centre of which would have been normally the anterior communicating. The left internal carotid artery connecting with the left anterior cerebral, while the right anterior cerebral has no such connection. The left posterior cerebral abnormally large, and the right one wanting, as seen in Fig. 1.

The dissection of the scalp was then continued downwards. The greater part of the left temporal bone, with the internal carotid attached, including the external and common trunk, removed. The internal carotid filled with wax emerged from the carotid canal, the injection having descended to within a short distance of the bifurcation. The ligature had ulcerated through the external carotid. Above the seat of the ligature the artery was closed by a clot which completely filled it, showing that the *secondary hemorrhage* came from the *proximate* side of the *ligature*. The ascending pharyngeal immediately above ulcerated through, but pervious; then the continuation of the external carotid, somewhat contracted; below the common trunk of the facial and lingual, as well as the superior thyroid closed by adhesive inflammatory action. These with the clot are shown in Fig. 2.

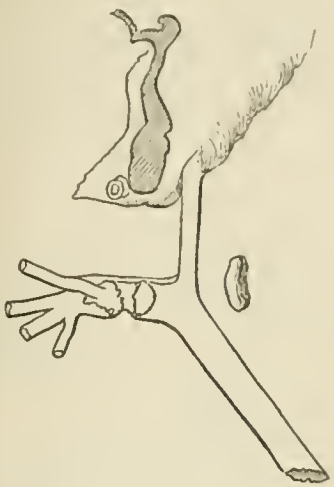


Fig. 2.

The diseased section of the inferior maxilla was then removed. On the right side the arch of the aorta with its branches was dissected upwards; at this stage our further dissection was peremptorily stopped by the representatives of the family, and we were only able to remove the carotid a short distance above the seat of the ligature, otherwise we should have traced its subdivisions, and also removed the temporal bone on that side. The ligature around the carotid was immediately below the superior thyroid, which was also ligatured. Immediately above the latter was a tuft of branches—a common origin for the lingual and facial, and the ascending pharyngeal; then extending upwards the continuation of the external carotid terminated in the internal maxillary and temporal arteries. But, owing to the above-mentioned

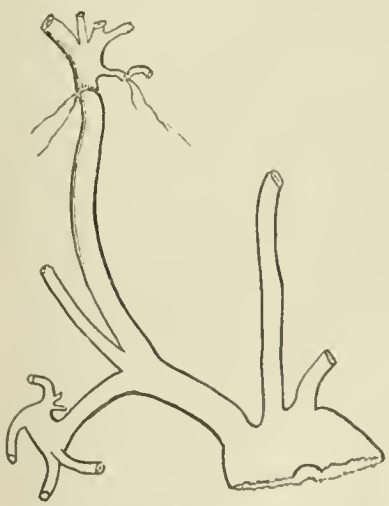


Fig. 3.

contretemps, our complete dissection of this unique specimen was cut short.

The segment of the maxilla included the ramus of the jaw and body as far as the anterior bicuspid

of left side: the ramus much enlarged; the second bicuspid and anterior molar firmly imbedded in their alveolar processes, while the second molar, quite loose, but perfectly sound, was held *in situ* by a shred of connective tissue; the third molar tooth still imbedded within the ulcerated gum, and quite loose. The alveolar process of the second molar entirely absorbed, also the anterior portion of the alveola of the third molar, as well as the lower portion of the posterior section of that of the second molar; beneath

Fig. 4.

the second molar the ulcerated coats of the inferior dental artery. At the upper and inner surface near the base of the coronoid process, two openings in the bone. The inferior dental foramen much enlarged, the inferior dental canal quite enlarged at section.

On the external surface, the bone much thinned and the mental foramen enlarged.

This unique case, although unfortunate in its results, throws considerable light on the subject of the ligature of the carotids, and resolves itself into the following aphorisms:

1. If an accurate diagnosis had been made when the case first came under my observation, removal of the diseased segment of the inferior maxilla should have been attempted.

2. The indications under the circumstances were undoubtedly the ligation of both external carotid arteries.

3. The recurrent hemorrhage, owing to the anastomosis between the middle meningeal (internal maxillary), anterior meningeal (internal carotid) and the lachrymal (ophthalmic) arteries; also to the one between the nasal or spheno-palatine (internal maxillary) and nasal branches of the ethmoidal (ophthalmic) arteries; again to that of the lachrymal (ophthalmic) with the deep temporal branches of the internal maxillary artery. The more remote anastomosis between the temporal (external carotid) and ophthalmic arteries is hardly worthy of consideration—demonstrates that an error was made in not *simultaneously* ligating on *left* side the *internal carotid*, which would have thus cut off the direct current from the basilar to the common carotid artery, thus affording a greater check to the development of the recurrent circulation.

4. In young subjects the ligature of both common carotids can be performed with comparative safety, as the collateral circulation through the vertebrals rapidly compensates the loss caused by the ligation of the former.

5. The mode of procedure adopted by me on the right side, although successful, demonstrates that it is best to seek the bifurcation; yet we would have here made an unsuccessful search for it, and would have been compelled to have placed the ligature at the seat of election, or else to have ligated the artery above the digastricus; therefore above the common origin of the facial and lingual arteries, and below its division into the internal maxillary and temporal arteries.

6. The secondary hemorrhage on left side arose from the cardiac side of ligature, as the distal extremity of the external carotid was completely closed by the clot prior to its removal from the artery. It is barely possible that the anterior pharyngeal may have slightly influenced it.

7. The neuralgia in the inferior dental nerve, controlled by compression of the common carotid on left side, shows that it was caused by the pressure of the aneurismal sac on the nerve.

8. The question arises as to the predisposing cause of this aneurism: was it due to the developments of the molar teeth on left side, inducing an increased circulatory action on that side, which, although anatomically normal, was, owing to the anatomical deficiency on the right side, physiologically excessive?

9. The control of the secondary hemorrhage by the combination of veratrum viride and digitalis demonstrates its value in similar cases; the first through the vaso-motors acting directly on the arterioles, the latter through the pneumogastrics on the heart.

Original Lecture.

A CLINICAL LECTURE UPON CHOREA.

DELIVERED AT THE LONG ISLAND HOSPITAL MEDICAL COLLEGE,

By ALLAN McLANE HAMILTON, M.D.

(Reported by Dr. James H. Shorter.)

Gentlemen:—It will be my pleasure to say a few words to you to-day in regard to a very common nervous affection of childhood. I allude to chorea, which is a disease you will constantly meet with when you leave here. I may safely say that two-thirds of the convulsive neuroses of children are designated by this term. You are doubtless familiar with the appearance of the little patients, but to illustrate my remarks more clearly, I have brought before you two boys, and I want you to examine them closely. They are both badly nourished children, delicate and pale. You will notice the dark, straight hair, thin lips and melancholy expression upon their faces; their brows are knitted, and their eyes sunken. These things strongly indicate a condition known as the *nervous diathesis*. It is among patients of this kind that we find nervous disease. I have seen a great many cases of chorea, but do not think that more than a tenth part of the number were of the blond type; but nearly all of them possessed the dirty-white complexion, cold hands, and rough skin which is accompanied by a phosphatic condition of the urine. Chorea, as the text-books tell us, is a convulsive affection without loss of consciousness, affecting generally certain groups of muscles, perhaps one-half of the body; attended sometimes by paresis, rarely by loss of sensation, and confined nearly always

to childhood. It is comparatively rare after the fourteenth or fifteenth year, and is generally curable.

In adult life, we find it to assume various unusual forms. The patients may roll over and over on the floor, spin like tops, or there may be paralysis with contractions. It is then usually the continuation of some previous attack, dating from early life. I propose to-day to speak more particularly of this neurosis among children. We are told by various writers that it is confined to the period between the third and fourteenth years, although certain authors, Watson among them, limit the time by the first and second dentitions. Dr. Hillier, of the Children's Hospital, Great Ormond Street, has given a table, which is referred to by Radcliffe in Russell Reynolds's System of Medicine. Of 422 cases at the above institution, 104 were between the ages of ten and twelve. Girls seem more often affected than boys, for what reason I cannot say, except that it may be the more delicate organization of the former, and the preparative changes going on before menstruation.

You will form a better idea of the disease if I relate a case. The patient, a boy of ten years, who attends school, becomes irritable, loses appetite, and does not care to go out and play with his fellows. He becomes pale and thin, and sits by himself. In a little while some movement of the hand or fingers, some twitching of the face, or dragging of one foot, when he walks, attract the attention of parent or teacher. He may be punished, with the idea that such movements are the result of bad habits or viciousness, but it does no good, but probably increases the trouble. These jactitations cease at night, when he rests uneasily, and is disturbed by bad dreams. This is the condition you will find the patient in. What is the course of the disease? If you do not treat him properly, or if he is neglected, it will not be long before the convulsive movements become general. The feet may drag along, as if he was paralyzed, and so he sometimes is, for the condition is a gradual one. He will be unable to button his clothing, or attend to his little wants. I have a patient under treatment at present, who presents a condition which is not uncommon, but I have not seen it mentioned in the text-books, as it should be. I allude to the involvement of the vocal cords, and the aphonia which may result. There are other defects of articulation, which arise from an inco-ordination of the lips and tongue. When the case reaches this point, we may consider the condition a troublesome one. Now, gentlemen, I wish to allude to the character of the convulsive movements, and I may begin by telling you that they are always *clonic*. You know that the two great varieties of convulsions are *clonic* and *tonic*, and I consider these terms simply clinical expressions, for it is a great matter of doubt whether there is such a *physiological* condition as a *tonic* contraction. A muscle in tonic contraction presents the condition shown by the electrotonic muscle, and though I may be bold in making a rash statement, I consider such a tonic or tetanic state simply a *very* rapid contraction of the muscular fibrillæ, and the rigid contraction of the limb a gross appearance. I think that the experiment with the tuning-fork will substantiate my assertion. We will, however, use the expressions *clonic* and *tonic* in their clinical sense to distinguish the convulsions. These contractions of the muscles in chorea are clonic; that is to say, there are intermissions of rest between the contractions. They are not increased by an effort of the will, to stop them, as is the case in sclerosis, where the tremors are exaggerated by any attempt of the individual to control them. In certain cases, however, there are exceptions to this rule, and I have often been led to suppose that chorea might be divided into two varieties, viz.: one, in which the movements are increased with the exercise of the will, the other, when they are most violent in a state of rest.* The movements of the hands are characteristic, I think. There is a prehensile movement of the fingers and a rubbing of the ball of the thumb and ends of the fingers. There is swinging of the arm, and a shrugging of the shoulder, as if the patient had on large or uncomfortable underclothing.

A little point that may, perhaps, interest you, and I only speak of it because it is unique: I allude to the habit which these little patients have of rubbing the seam of the trousers' leg by the hand which is affected, for these movements often go on most actively when the arm hangs by the side, and when the attention is not directed to it. In other diseases just such "little straws" will give you a serviceable hint once in a while. Take, for instance, commencing paresis of any kind of the lower limbs. If you look at the tip of the shoe you will find the sole worn down on one side of the body. In locomotor ataxia you will discover a reduction of the heel. When these little patients are worried or embarrassed the movements are greatly increased, and you must bear this in mind in your subsequent management of the case. The urine is generally neutral, or else it contains dense clouds of the phosphates. It is passed in the majority of cases in great quantities.

Now, I wish to say a word about the etiology. It is the general opinion that chorea is nearly always associated with cardiac or rheumatic troubles. Romberg, Hughes, and West, besides many others, have so decided; and when we consider the pathology of the disease it will appear to us very reasonable. Of 104 cases of chorea at Guy's Hospital, but 15 of the number were free from any indication of cardiac or rheumatic difficulties.

It often follows scarlatina or other zymotic febriculæ, or takes its origin from an attack of acute rheumatism. The oldest of these boys first went through scarlet fever with kidney complications, which were unusually severe. The disease may result, and generally does, from some directly exciting cause, such as over-study, bad air, or food, or sudden fright. My recent investigations in regard to the occurrence of the disease among school children revealed the astounding fact, that over 20 per cent. of young school children of the public schools of New York were affected with choretic affections of greater or less gravity. West expresses it as his opinion, that over-study is a common cause, and my investigations more than prove this. I will allude, *en passant*, to a cause which is often overlooked. I mean want of exercise, and eating between meals. The confectioner is one of the worst enemies of the practitioner who treats nervous disease.

In regard to the pathology, I can only say, that a great number of observers believe the disease to be a functional one, and a few take the view which I believe to be the right one, viz., that the disease is organic. Hughlings Jackson, an able investigator, considers the lesions to be located in the corpus striatum, where small thrombi plug up the minute vessels. The microscope has proved this. Some writers have raised the question in regard to the existence of the hemi-chorea on the same side of the body as that of the brain where the lesion is found, and contend that there must be crossed action. Broadbent opposes Hugh-

* In a recent conversation with my friend Dr. S. Weir Mitchell, he remarked that he had often recognized the necessity for such a division.

lings Jackson to some extent. Now, it is easy to see how these plugs may come from the heart. A condition of this organ has been witnessed by some observers, where fibrinous masses were adherent to the chordæ tendinæ and chordæ columnæ. These little shreds may be detached and carried up in the circulation. They are really small emboli. As to the inconsistency of the hemichorea occurring on the same side as the lesion, I do not think it is at all impossible. Dupuy and Brown-Séquard have made experiments which prove that such a condition of affairs may exist—and I have myself done the same thing. Since my experiments, I have heard of a case, related by Dr. Walter Hay, of Chicago, in which post-mortem examination revealed a cerebral hemorrhage on the side of the hemiplegia. I have before said, that clonic convulsions are those of the disease under consideration. Now, I wish to tell you, that this variety of convulsion, like tremor, is due to an interruption of nervous discharges, and a point of irritation at the seat of origin of motor impulses. It is very probable that there is trouble also in the nerve trunks. Ellischer has confirmed this in describing the degeneration of certain nerve-fibres in a case of chorea that recently died from some intercurrent disease. Schmidt calls attention to an explanation he gives. The origin of the neurosis, he says, springs from anæmia in the first place, and, secondarily, spinal irritation, which he suggests is symptomatized by the painful points which are found in the spinal column. It is undoubtedly a sensori-motor disturbance, due to insufficient nourishment of nerve-tissue; and that is enough for us to know.

Fatal cases of chorea are rare. Hughes and Bastian have both collected cases, most of which presented extensive changes in the nervous substance. Lately, Ellischer has given us an account of a most interesting observation. The vascular changes in the brain were marked, the walls of the vessels being changed, and the surface covered by dark granules. In certain places the calibre of the vessels was narrowed, and there was an accumulation of blood-corpuscles, and consequent effusion of the watery parts of the blood. Some of the vessels contained coagula. The connective tissue about these vessels was thickened and increased in size, and contained yellow pigment and granulated nuclei. The large ganglionic cells in the brain were filled with pigment, and the cell contents much changed. Sections of motor nerves exhibited red patches, and destruction of nerve-fibres. These changes show, then, great vascular alteration, and degeneration of normal nerve-tissue.

The PROGNOSIS is generally good. A case of acute chorea—and I consider it to be one that has not progressed more than a month or two—should get well with proper treatment in about the same length of time; but you will generally meet with the chronic type of the disease, and will then have your hands full—and will be lucky if a cure is wrought in five or six months.

These cases rarely die from the disease itself, but either outgrow it, or end their days by some other disease.

In the matter of diagnosis I have very little to say. I do not think chorea can be confounded with any other neurosis. You will have to make the differential diagnosis sometimes between it and tremors of various kinds—but there will be no trouble—the movements are characteristic. What I have already said about sclerosis you must remember. You must also know that certain irregular movements may be simply bad habits, also that certain limited convulsive twichings are found in connection with ascarides.

It is important and difficult sometimes to make a diagnosis when chorea follows hemiplegia, or is associated with other organic neuroses. A condition called *athcotosis* by some writers I believe to be a choretic state, and various neuroses of the convulsive kind, now designated by different titles, I am sure are nothing but varieties of chorea.

A peculiar form of hemiparesis must be differentiated from the hemiplegia, cerebral hemorrhage or other brain lesions; but these are uncommon affections, and slow to disappear, while the hemiparesis of chorea is amenable to treatment and follows the choretic movements, and passes away in a comparatively short time. I wish to tell you of an interesting case, with a peculiar complication, which might mislead one in diagnosis. The patient, a boy of ten years, was brought to me by his father for treatment, after having been seen by many practitioners, who did not agree in regard to his condition. I saw that his movements were choretic. Questioning revealed the fact, that he had never been a strong child, but had always been disposed to nervous troubles; even the exanthematous fevers, which, like other children, he had had, were generally connected with stupor, and other evidence of susceptibility of the nervous substance to blood-poison. He never had any rheumatic nor cardiac affections, and I could hear nothing to indicate valvular trouble. The heart sounds were sharp and quick, however. Four years ago he began to decline, became weak and anæmic, was irritable, moody, and bad-tempered. His appetite was capricious, and he preferred candy and sweets to more solid food. In the summer of 1872 the movements in the hands and arms began, and soon became general. His rest was uncomfortable, and he started up in his sleep and cried out. When I saw him four months ago he was a pitiable object. His movements were general. He was unable to hold anything, and was powerless to perform any voluntary action, except those of a general kind. He could not unbutton his clothing nor put on his cap. His mother even had difficulty in making him walk.

Variety of Movement.—Head was violently agitated, there being contractions of the sterno-cleido-mastoideus. He "sucked in his cheeks," and pursed up his mouth, smacking the lips. Other facial contortions were violent. He winked spasmodically, and there was constant motion of the eyeballs.

The arms were in constant motion, but the right was not affected so much as the left. The right arm and hand were slightly paretic, and he was able to force the column of fluid in the fluid dynamometer * up to 16°, which is equal to 15 lbs. pressure to the square inch. The left forced it up to 18°.

The legs.—The right leg was also slightly paretic. The toe of the shoe was worn down to some degree, although the walk was not noticeably affected.

There was an uneasy rolling of the pelvis when he sat down, and the legs were not entirely under the control of the patient. There was pain in the wrists and ankles. Under proper management of his diet he gradually improved, and at the last visit was nearly well. I noticed then for the first time the following peculiar state of affairs: When sitting in front of me, I told him to raise his hands, one after the other. The right hand he raised promptly, but the left he could not, unless he took hold of the wrist with the other hand, and lifted it up. This condition struck me as remarkable, particularly as he had to repeat the process of aiding with the right hand. Several neuroses

* Described in Psychological and Medico-Legal Journal, April, 1875.

might explain the condition, however, and I proceeded to eliminate them in the diagnosis.

1st. *Paralysis.*—The left hand and forearm might be paretic. There was no loss of electro-muscular contractility, however, but, if anything, it was increased. The muscular power, tested by the dynamometer, was found to be even better than in the other hand. There was no atrophy. With these facts in view, it seemed improbable that this should be the cause.

It was found that when the other hand was held down, the boy was then able to lift his left hand unassisted, and even to raise a dumb-bell weighing 10 lbs., but so soon as the other hand was released he was unable to repeat it.

2d. *Habit.*—To determine whether this was the result of any bad habit, I ascertained from the father that his son had never used one hand to lift the other till a few weeks ago.

3d. *Central changes.*—I have been forced to accept the theory that there is some central trouble, or else some change in the nerve itself affecting its conductivity, although the absence of sensory or motor disturbance (the limb being neither hyperæsthetic nor anæsthetic, and there being no loss of motor power, but, on the contrary, greater muscular excitability) would contradict this. As we know, one of the first signs of certain central troubles is this very marked electro-muscular contractility. The only hope for diagnosis rests with the advance of time, when, if central disease exists, it will manifest itself by other symptoms. If this is not the cause of the disease it is very probable that it may be hysterical.

We will now speak of *treatment*, and this, perhaps, is of more importance than anything else of which I have spoken, and in giving a list of drugs I will exclude a great many remedies that have been used with indifferent success, and only allude to a few, in the order I believe them to stand in point of efficacy:

Internal remedies.	Strychnia.	
	Arsenic.	
	Iron in its various forms (bromide, carbonate, etc.).	
	Phosphorus.	
External remedies.	Cold to spine.	Ice.
		Ether spray.
		Cold douche.
	Russian or Turkish baths.	
	Salt baths.	

Rest, diet, fresh air.

Some of these may be combined with good effect. The plan of treatment I generally employ is the following: Should the child be "run down," as is generally the case, I begin with some preparation of iron, and administer at the same time cod liver oil. As regards special treatment, I find strychnine serviceable carried up to the point where stiffness of the sural muscles is arrived at. Next to this I consider arsenic to stand. It must be given in large doses. You will occasionally find that digestive troubles are produced very quickly by this drug, and then strychnia may be substituted. Cold to the spine cannot be overestimated as a plan of treatment. You may either use the ether spray, which was first suggested by Subetski, of Warsaw, in 1866, or apply ice-bags every day, allowing them to stay on about ten minutes. Perrond, who has used the ether spray, makes applications from four to eight minutes in duration every day. Of thirty-five cases I have treated in this way (I mean with the ether spray) from fifteen to twenty applications produced permanent benefit, and here I would say that the spray should be directed to the upper part of the cord, over the upper cervical vertebræ. Eserine has been lately recommended, and Bouchut has given the results of 437 cases, 205 who took it in pilular form, and 232 hypodermically. Eserine is the alkaloid of Calabar bean. The average dose was from two to five milligrammes. He obtained temporary benefit, which seemed to wear off; but when the drug was repeatedly administered he accomplished many cures. He reports twenty-three cures, by an average of seven injections. It is a dangerous remedy, however, and produces severe gastric symptoms.

The salts of zinc have occasionally proved valuable in cases of this disease, but I prefer the remedies I have mentioned. Conium is occasionally efficacious, but its effects are temporary. I must say, before going further, that I have found phosphorus, with cod-liver oil, to be a most valuable curative agent, and in cases where everything else failed, it has succeeded. This seems reasonable, when we consider how much impaired must be the nutrition of the nervous matter. Now, gentlemen, you will find instances where nothing does good. Put them in a dark room, and keep them perfectly quiet. You will be often astonished at the result. Weir Mitchell has written of the value of this treatment, and I refer you to his lecture. There are little things that must be watched. The diet, above all things, should be regulated with judgment. Plenty of fresh air and sleep come next, and absolute mental rest must be enforced. The school books and the school room are to be parted from, and agreeable diversions planned. An excellent auxiliary to your medication is the salt bath. A handful of rock-salt in the water, and the energetic use of the rough towel, will infuse a tone and vigor that will soon become apparent. In conclusion, I must tell you that decided medication is useless in these patients when their personal habits are not looked after; but if you will start them upon the right track, and afterwards give the medicines I have named, you will have the satisfaction of generally curing your case, and covering yourself with glory, for the cure of chorea is considered by the friends of the patient to be a great triumph.

NEW YORK, *Jan.* 18, 1876.

Progress of Medical Science.

ARTHROPATHY IN A CASE OF LOCOMOTOR ATAXIA.—M. Bourceret recently reported the following interesting case to the *Société Anatomique*: A middle-aged woman entered La Charité on April 8th, giving a pretty well-marked history of locomotor ataxia, that dated back ten months, and affected the left leg particularly. Three days later her left thigh and buttock suddenly began to swell. The swelling reached its maximum in a few hours, was hard, not truly œdematous, not painful on pressure, and ended abruptly at the knee. There was no fluctuation. The affected parts were double the size of those on the opposite limb; the leg was shortened, and the foot slightly rotated outwards. There was also a certain resistance without tenderness in the left iliac fossa. The swelling disappeared almost entirely in a week, and about this time vaginal examination discovered a round, smooth, hard, fixed tumor, apparently springing from the pelvic bones in the left side. Soon afterwards pus was detected in the sheath of the psoas, above and below Poupart's ligament. On May 3d the left knee began to swell, with symptoms of great prostration, and death took place on the 6th.

On the autopsy pus was found disseminated between the muscles of the thigh, especially on its external and posterior aspects. The pus had also perforated the sheaths of some of the muscles, separating but not destroying the fibres—a proof that the effusion had taken place with great rapidity. Anteriorly it had perforated the sheath of the psoas, and made its way into the pelvis, where it was infiltrated between the fibres of the iliacus. The capsule of the hip joint was much thickened, contained some calcareous concretions, and was perforated below and behind. The borders of the cotyloid cavity were eroded behind and below. The head and two-thirds of the neck of the femur had disappeared, the inner surface of the neck being smooth and slightly eburnated. There were no osteophytes about the neck or great trochanter, but on the contrary in some places there was rarefaction of the bone. When the capsule was opened the femur was found to be luxated backwards, the enlarged capsule allowing the luxation to be easily produced, and as easily reduced. The left knee was distended with pus, and the cartilages were eroded in spots. The right hip-joint was unaffected.

On laying bare the cord, a small fibroma, about the size of a pea, was seen on the right posterior lumbar roots. The posterior roots on both sides were completely atrophied as far up as the cervical region. They had a yellow color, and were very vascular. In the lumbar and inferior dorsal regions the median posterior columns were gray, hard, and apparently composed wholly of sclerotic tissue, while the lateral portions of the posterior columns, though degenerated, were soft, and of a reddish-gray color. The lesion gradually tapered off towards the cervical region, where only the median posterior columns were affected with the reddish-gray degeneration.

In the discussion that followed, M. Charcot called attention to the wonderful rapidity with which the lesions of spinal arthropathy are produced. He mentioned a case which had been under his own charge, in which the humerus had been destroyed in the short space of three months. In his case, as in that of M. Bourceret, the destruction was like what would be produced by rubbing a bone on a grindstone. This rapid destruction of bone is habitual in and peculiar to the arthropathies of ataxia. There seems to be in these cases a peculiar abnormal condition of the bone, which favors their rapid destruction. Spontaneous fractures are, it is true, very frequent in ataxics, but in this instance it was of no importance whether there had been a fracture or not. The pressure of pus in this case was exceptional, but it had been observed now in three out of about fifty cases. A dry arthritis might in these cases be transformed into a purulent arthritis.—*Progrès Médical*, Oct. 9, 1875.

Hæmoptysis Treated with Ergot.—Dr. Jas. M. Williamson has made a fair trial of this drug in the treatment of fifty cases of hæmoptysis, and with encouraging success. The ergot was given invariably by the mouth, and in the form of the fluid extract. Forty-minim doses may be administered twice within the first hour, and guided by the results, at least every two hours afterwards, the dose being diminished and given less frequently as the hemorrhage subsides. No disagreeable effects were observed to follow, even when large doses were given at short intervals; but, he says, that if four or five full doses make no distinct impression upon the hemorrhage, the remedy should be abandoned for another. This treatment proved ineffectual in only six out of the fifty cases.—*Lancet*, November 13, 1875.

Syphilitic Phthisis.—Fournier sums up in the following four axioms the conclusions he has reached on this subject:

1. Tertiary syphilis can produce in the lungs lesions which, either locally or by reacting on the general health, simulate pulmonary phthisis.

2. These pulmonary lesions of syphilis are often amenable to specific treatment; however grave and important they may appear, they are far from being always beyond the resources of art.

3. Consequently, when a case of pulmonary lesion presents itself, it is important, unless the existence of tuberculosis be quite certain, to ascertain if the lesion can be traced to syphilis. It is necessary always to bear in mind that syphilis is a possible cause of pulmonary lesions.

4. When syphilis can be suspected to be the cause, the primary indication is to prescribe specific treatment, which in similar cases has sometimes been followed by the happiest results.

In making a differential diagnosis, Fournier relies mainly on the syphilitic lesion being unilateral, circumscribed, and without predilection for the summits of the lungs. It generally affects a portion of the lung not more than a few centimetres square, constituting a little islet of disease surrounded by healthy lung-tissue. When the morbid changes are far advanced in this circumscribed spot, the diagnosis of syphilis is pretty safe. The co-existence of a fair degree of health and *embonpoint* with advanced pulmonary changes, points to syphilis as the cause of the latter, as does also a slow development of the pulmonary lesion, the general condition remaining good. Of course, a close examination of the entire body for the ordinary symptoms of tuberculosis or syphilis must never be omitted.

There is no hereditary transmission of pulmonary syphilis.—*Gazette Hebdom.*, Dec. 17, 1875.

Removal of the Entire Right Parietal and Half of the Frontal Bone.—Dr. John R. Hayes reports a case, where, after a severe burn, these bones were exposed. About five months after the injury the patient presented herself, complaining "that the bones of the head were falling off." The right parietal and half the frontal bone were found separated from those of the opposite side, to the extent of about an inch, and slightly movable. At first no interference with them was made, serious results being feared. On the third day, however, the bones having separated a little more, the whole parietal and half the frontal bone were removed. The inner surface was covered with a thick curdy matter, and the depressions for arteries, etc., obliterated. The surface of the dura mater was covered with florid granulations, and a quantity of fetid pus came away. On making slight pressure on each side of the head, "a quantity of pus welled up from between the hemispheres." The patient felt no inconvenience, neither headache nor any other cerebral symptoms. The surface was washed with a weak carbolic acid lotion, after which water dressings were applied. In ten days it was changed to zinc dressings. The surface occasionally bled from the slightest touch.

Two months after, skin was grafted on the surface of the granulations at four different places; three became attached and the other fell off. Four months after this the patient seemed to be quite well. New skin had grown nearly over the entire of the exposed surface, and she was able to attend to her ordinary duties without complaining of any pain.—*The British Medical Journal*, December 25, 1875.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, February 5, 1876.

HOSPITAL CONSTRUCTION AND ORGANIZATION.*

III.

HOUSE-PIPES enter so much into structure, as to demand our next consideration.

While some drain-pipes are needed under basements to secure dryness, and if carriers of water only are not liable to get out of order, if properly laid, all other pipes should not be under the buildings, but be arranged so as to be as accessible as possible. The greatest pains must be taken that all water-pipes, heat-pipes, gas pipes and soil-pipes connecting with the buildings, be made as impervious as possible. Direct experiments have shown how few materials are impervious to air. Besides, sewer gases act upon many metals, and cause such corrosions as increase porosity. We have recently had sent us a specimen of pipe lined with glass, which has been in successful use, and seems to secure that impermeability which is desirable in house-conduits, and that smoothness which prevents adhesion to the surface. It must be remembered, too, that all pipes, unless very closely compacted with the structure through which they pass, on their outside, form special capillary air-conduits. The heating apparatus, especially, is thus liable to become a mixer of the air of different wards, if one apparatus is used for all.

The method as to sewer-pipes is thus given by our authors: Dr. Billings (p. 43) speaks chiefly of plans for ventilating sewers, and recommends shafts rising above the buildings, but not connected with any of the aspiratory chimneys. Dr. Folsom alludes to them only incidentally. Dr. Jones (p. 111) has the house sewers discharge into two main sewers on the hospital grounds, the former being not less than two feet, and the latter four feet in diameter. These to be ventilated, and all water used for culinary and bath purposes to flush the water closets and empty into the main sewers. He also proposes a system of fountains on the grounds, the waste water from which should flow into the sewers. Dr. Morris (p. 223) would have every water-closet separately trapped, and every pipe carrying soiled water furnished with traps. The main sewer should be outside the grounds, as suggested by Dr. Folsom as to the main drain. To prevent reflux of air from this "sewer" into the "drains," a connection should be made with the furnace of the steam-heating apparatus.

The spouts collecting the water from the roofs should fall into the sewers, these openings, when not stopped by water-flow, serving as ventilators. Other drain-pipes should connect with flues, opening above the roofs. Drainage and sewerage are spoken of as if the same.

Dr. Smith has very little to say as to methods of carrying off the waste-water, but in reference to the risks of sewers, advocates ground ventilation (p. 228), by means of a heated shaft communicating with drain-pipes and conduits. He would have the more superficial conduits porous, and would so ventilate and warm the soil as to draw gases from the ground into them, and discharge them above the buildings.

Dr. Niernsee (p. 336) provides that no soil or water-pipes should pass under hospital buildings.

We beg to suggest that it would be better if we could confine the name "drains" to tubes for the carriage of surface and sub-soil water, and regard all water contaminated by ablutions, by fecal matter, or by any of the offal incident to dwellings, as to be carried by pipes known as sewers, soil-pipes, or wastage-pipes. The terms "main sewers" and "house-connections" are sufficiently distinctive, if "soil" pipes, to some, confuse the idea of ground soil and fouled water. We believe, with S., that water-closets, baths, etc., should be, as far as possible, separated from other buildings. The laundry furnishes a large amount of impregnated water, and the soaps used in washing, not only, by their decompositions, add to the impurity, but help to befoul the sewers with adherent matter.

Flushing by the water from the roof spouts failed us in a fair test of three years' duration. In quick rain-fall, the air is so rapidly displaced (Parkes' Hygiene, p. 349) as to break or exhaust the traps. The emptying of fountains into the pipes opens ventilators at points not desirable, and will be of little service. It is doubtful whether any of the water-traps are successful, and whether foul water even, when not emptied by suction, is a good interruption to gases. Dean, of Rochester, after careful experiments on his own house, discards them. (See Health Asso., 1875.)

Ventilation of sewer-pipes by means of heat must be well guarded, for heat is a promoter of decomposition. The caution of Billings is good as to the separation of sewer ventilating shafts from aspirating

* HOSPITAL PLANS. *Five Essays Relating to the Construction, Organization, and Management of Hospitals.* Contributed by their Authors for the Johns Hopkins Hospital, of Baltimore. New York: William Wood & Co. 1875. 8vo, pp. 355.

chimneys. Down currents sometimes are detected, even where fire is adjacent, especially as to descending flues. "Eckstein on Chimneys," gives important cautions. The size of ventilating shafts must be nearly that of the soil-pipes themselves. They are of little account if left to natural ventilation.

We believe a complete separation of connection between house-pipes and main outside sewers is the only feasible plan. Each house sewer-pipe can in this way have only its own relation to the building and to the main, and thus concentration of poisons can be prevented. The excellent paper of French, on Drainage (Mass. Report, 1873) also alludes to house-sewerage, and gives a most excellent method of sewer separation. The last Report of the Board of Health of the District of Columbia also well illustrates some of these points. This outside method of breaking connection admits of airing and disinfecting and filtering. The pipes between the house and the main should be so vitrified or glass-lined as to prevent adhesions on the inside, and should be flushed each day with some disinfecting solution. We have much to say as to preference for the dry system for much of hospital excreta, but here must confine our remarks to pipe construction.

The only plea for sewer-pipes of two and four feet diameter is that they admit of inside patrol. A pipe of too great calibre does not cleanse itself as well as one adapted to the amount of waste to be carried (see French, etc.). We would have also two continuous pipes from each ward, laundry and kitchen receptacle, so that as often as need be one might be shut off and flushed with air and gaseous disinfectants, or cleansed by an inside piston. We believe the time will come when the various pipes that enter into house construction will be so arranged as to admit of direct police, without removal of ground or floors, so that any defect may be prevented, and after cleansing by flushing, the parts may be swabbed out.

Next to the consideration of structure, we come to consider the relative arrangements of the buildings and of the various parts, each to the other.

It is at once agreed that no building shall rest directly upon the ground. There are some reasons why a military plan should in some cases be adopted, and parts be located on arches three or four feet high, without excavation. Thus we secure a well-drained and well-aired ground surface, just like that of the surrounding soil. Floors, such as we have noticed, may be filled between the under-beams with brick or cement, supported on an open iron frame, or by an extra underboarding, and the porousness of side inclosure is easily insured. Thickness of inclosure here, as elsewhere, comes into consideration.

If, as is usual, a basement or cellar be advocated, we must be careful to define it before we assign its utilities. A basement with drains, so as to care for all surface water and keep all ground water at least six (6) feet below (S., p. 277) the surface, with areas to the outside walls, and space and air ducts below (N. p. 333), and with only two or three feet of a high-ceiled basement below the surface, is not the underground base concern which it is popular and proper to taboo prodigiously.

The basement of Billings, p. 27, is 9 feet high, all above ground, floored with asphalt and heated and ventilated. That of Folsom, by plan, must be at least 8 feet high, with 5 feet in the clear above ground, and duly asphalted and dried below. That of Jones (p. 163) is 12 feet high, with a good share above ground level. The basement of Morris (pp. 195 and 220) is "lofty," with large windows and as well-lighted, well-ventilated, and well-finished as any other part of the building, with vaults and cellars beneath, made as dry and airy as possible. The floor of the basement has imported Portland cement walls, with hard-polish plaster. If any part of it by grade is brought below ground level, there is to be a wide area, with sloped embankments. The basement of Smith (p. 298) is 6 feet above ground, with double-aired side walls, asphalt and concrete floor and under-drainage in the deepest perfection of the art.

We rejoice with much joy over good foundations, and feel glad that such attention is bestowed by our authors upon the beginnings of the great uprising. But we demur a little from calling such structure a basement, unless we reject the definition of Webster, "a story below the level of the street," and accept that of Worcester, "the first story on which the main order of architecture rests." We believe in just such first-story structure, but such basements can be made far more available than most of our authors suggest. We do not wonder that Dr. Morris assigns at least *mania à potu* to one of these basement rooms, and has in one end a dispensary (p. 251), although afterward insisting that second or (really third stories) are healthier than those below. Such sub-structure is suitable for reception wards, for walking patients, for some forms of disease, and for various administration purposes. Much of the question as to two-storied structures above depends upon the estimate put upon such apartments as these. We should certainly never think of putting a double tier of wards, making a height of forty feet, without attic, above such high basements as these. Clean ground is not so unwholesome a thing. If we are to have such lofty substructure we should surely utilize it after the plan of Dr. Jones (pp. 163, 164), with exception of laundry and some minor alterations, and should so far carry out the ideas of M., as not to need his second (third) storied ward.

The question as to whether the buildings shall be erected for temporary or permanent occupancy, and the allied, although not the identical question, whether they shall be of single or successive stories is, as it well may be, prominently considered by our authors. We find the most of them laboring under that confusion of terms, which of late years has found its way into hospital nomenclature. The letter of the trustees speaks of "the choice between the *pavilion* system,"

which admits of two or more stories in height, permanently constructed, and "the *barrack* system, of one-story structures, destructible in whole or in part." B. very wisely uses the terms temporary and permanent hospitals as the only ones having definitiveness, and considers the question of number of stories as distinct from that of length of occupancy. Yet afterward, in the use of the terms, "wooden barracks," "barrack hospitals," "one and two story pavilions," he gives currency to these loose nominals.

Dr. Folsom (p. 26) speaks of pavilion wards, but, we are glad to see, usually avoids the modern terms. Dr. Jones (p. 113), while using the words temporary and permanent, as a heading, speaks much of destructible wooden pavilion hospitals, of the pavilion system, of temporary pavilion hospitals, etc. Dr. Morris (p. 178), while guarding against the application of the terms pavilion and barrack, as not distinctive of one or two story, or destructible and indestructible structures, proposes the terms "City Hospital," as denoting permanency. Yet he also bows to custom, and speaks of "temporary barracks and hut hospitals," of "pavilions of two-story elevation," of "separate pavilions," and of "pavilion wards." Dr. Smith (p. 291) quotes the faulty definition of Miss Nightingale, who describes a pavilion "as a separate detached BLOCK of buildings, or separate detached hospital, with as little connection in its ventilation with any other part of the hospital as if it were really a separate establishment, miles away." He says (p. 292) that a pavilion may be a tent or barrack, and may have one or many stories. Niernsee (p. 336) speaks of the "pavilion system of temporary barracks, and permanent pavilions," and says, their complete separation, as well as the number of stories, is still an open question. Here is great tribulation of nomenclature, which our essayists have not originated, but which, as representative men, they have a right to throw off as "impedimenta."

A barrack, in comparison with a tent, is the military word for permanency, just as of old the temple was more permanent than the tabernacle. In hot climates it would be a wooden structure, to be torn down if convenient on taking march; but in colder climates it was left behind, while the tents were moved on. In this vicinity are large brick structures, erected one hundred years ago, in which the British army quartered. They were called then, as they are now, barracks. The two-story Stone Barracks, of Fort Reily, Kansas, are not movable structures.

When the plan of wards, in wings or as offsets, from the main building came to be discussed, the terms "pavilion," and "block" crept in to denote this *isolation*. For asylums, the term "cottage system" was similarly employed. Now, the real idea of pavilion is something "light, temporary, evanescent." It was the Latin term for butterfly, and had before that application to light and movable encampments. The pavilions of darkness (2 Sam. 22: 12) were clouds. The pavilion which Benhadad feasted in (1 K. 20: 12) was a tent or booth (Keil and Bertheau). When Nebuchadnezzar spread his canopy (Jer. 43: 10), or (A. V.) pavilion, it did not mean an offset to a main building. Its use in architecture, to denote a turret or such insulation, as Gwilt and Brande describe, do not justify its present application. Addison's "royal pavilion" was a tent, and the "field pavilioned" of Milton was a tented field. Let us forsake the innovation, and talk of temporary and permanent hospitals of isolated and aggregated wards; of one or many storied structures, as the case may be.

It is to be borne in mind that this hospital is to be a hospital for the more serious sicknesses. In other words, the convalescent hospital, which, as suggested by F., may also rightly accommodate a class of comfortable incurables, makes the sickness in this hospital more grave. The classification of S. (p. 360), as taken from Bellevue, of 242 able to go up-stairs, 100 to walk about the wards, and only 99 in bed, will not do here. The kind of arrangement needed is modified by this consideration. We hope that the convalescent hospital will be so situated as to be readily accessible by special rail cars for invalids from this hospital, and so admit of easy transfer. And it must be borne in mind that it is equally important as this one to the Medical College. The student needs to study the modified conditions of chronicity and of convalescence, and also to study the physiology of such subjects as well as the intenser pathology. If we are to be patients of any of these gentlemen, we prefer the student who spends in his preliminary course twice as much time on these, as upon the curiosity cases or severer cases. Close clinical observation here gets its first, best start, and prepares for those intense studies which belong to intense cases, and to such maladies as will be seldom met in practice.

Then, again, inside arrangement and height of structure must be made subservient to questions as to classification of disease. The experience of each year is making more definite the lines of demarcation between diseases, and teaching us not only their separation, but that different forms of disease need variation as to surroundings and appointments.

The controlling idea as to the size of wards is regulated much by relative considerations. With the necessity of wards for colored people added to the classification of disease, it is quite apparent that in a hospital of 400 beds, in order to isolation, not many wards will need to be large.

Entire separation of males and females is also insisted upon, but as such a hospital can only be conducted under close discipline and constant personal presence, we see no reason why, in bed diseases at least, the same ward should not be occupied at one end by women, and the other by men, so long as there is a proper cross screen, and passage from one part to another is prohibited. The need of disease classification is recognized by all our authors. A sentence from B. (p. 14) well shows how much questions of inside ar-

rangement turns upon this. "If men affected with rheumatism, disease of the heart, organic disease of the stomach, and paralysis, are placed together in a ward, the danger of hospitalism and infection arising among them is exceedingly small."

A CURE FOR "INCURABLES."

An attempt is being made to establish in this city a hospital for the cure of chronic and intractable diseases. No one is prepared to say on general principles that such an institution is not very much needed here, that it would not have a wide field for usefulness, and be gratefully patronized by a large number of pitiable sufferers. From the recent circumstances, however, which have attended the inception of the enterprise we are inclined to the opinion that the time has not yet arrived to give a practical turn to the sympathies of the profession and of the public. We have no right to question the motives of any medical philanthropist who believes that he is to be the special instrument in the hands of God of working out the salvation of a hopeless class of his afflicted fellow-beings; charity for the humanitarian instincts of our profession places such motives beyond the pale of criticism. Neither do we desire to doubt the special skill of any one who openly and defiantly boasts of extraordinarily brilliant results in the treatment of desperate cases.

The history of all great discoveries teaches us to be cautious in the premature expression of opinions concerning such matters; not to condemn genius in any shape, whether it discovers the circulation of the blood, the principle of anæsthesia, the cure for hydrophobia, the protective power of vaccination, or a new treatment for asthma, chronic rheumatism, and other so-called incurable diseases. New ideas are the landmarks of progress which are offered to us by the benefactors of our race, and cheer us in our toilsome journey toward the goal of therapeutical perfection. All we ask, however, is to have any novel claims properly substantiated by some few significant and telling facts. This is the principle which as impartial students of truth we have a right to discuss in connection with the prospective establishment of this new hospital. The projector of this charity has conveyed the impression, in an article published in full in one of the secular papers, and previously read before one of our medical societies, that the profession did not understand how to treat certain chronic diseases, and that their cure has been a lost art which he had been fortunate enough to discover. This is all very well; and if he can substantiate his claim by scientific facts, he is entitled to the respectful consideration of those of his brethren who are anxious to learn of his method. He leaves us, however, with the simple assumption that we are ignorant of the principles upon which his treatment is founded, and fails to fulfil the promise made in his paper to further enlighten us. In fact, he gives us to understand that he is not prepared to publish his methods to the scientific world until he shall have a hospital where these methods can be demonstrated. With a few who might stoop to question the motives of such a publication in the public prints, the suspicion might arise that this was a case of medical advertising in its most glaring form. But from the fact that any objections which were urged against his course came, as he says, from only such of the few who belonged to the younger and uninitiated members of the profession, it is perhaps not worth while to consider them. We may, however, for the sake of the laudable motive of establishing a hospital for the cure of these so-called "uncurable" diseases, and enlisting the favor of the public in behalf of his project, excuse this flagrant violation of the Code, more especially as his endeavors have since been endorsed by a large number of the most eminent men in New York, who have signed his petition, and thus recognized his superior skill.

Upon this medical endorsement hinges the ultimate success of his undertaking. In fact, this certified approval by the most "eminent medical men" here, carries a weight with the public which no one can question; and while it tacitly acknowledges that the profession, as a whole, are ignorant of what they should know, it commends the projector of the new hospital as a gentleman of superior fitness for his work. This is certainly a very flattering compliment, and well worth the trouble of obtaining the signatures.

In due time a call for a public meeting to consider the feasibility of the hospital project is made, signed, among others, by Drs. Marion Sims, E. H. Davis, Mark Blumenthal, and Joseph Wooster, and the meeting is held. The clergymen who were present, and who made addresses upon the occasion, very properly commended the movement from a humanitarian point of view; but the medical responsibility of the affair was thrown entirely upon the "eminent medical gentlemen" who had so cordially endorsed Dr. Hartt as the right man in the right place. Chancellor Crosby gracefully and prudently acknowledged that he could take no responsibility in deciding the medical merits of the movement; but when he saw such names to the petition as those of Alonzo Clark, Gurdon Buck, and Chas. A. Budd, he felt himself safe in following their lead. The Rev. Dr. McGlynn, who also spoke upon the subject, said, in substance, the same thing, and so the leaders of the medical profession are likely to have all the credit that belongs to the inauguration of so pretentious an enterprise. The expediency of signing the document is, on a question of principle, open to some discussion. We have been led to place such implicit reliance upon the judgment of some of the medical leaders in this city, that we hardly thought it possible for them to be so ready to write their names to a document which on its face was a reflection upon the skill, learning, and capabilities, not only of themselves, but of the entire profession of medicine of this city.

Having entered our protest against this careless man-

ner of writing certificates, so common even with our best men, we ask them in the name of the great body of the profession whom they have the honor to represent, to use in future that prudence in the discharge of their responsibility, which we have a right to expect of them.

Reports of Societies.

NEW YORK COUNTY MEDICAL SOCIETY.

Stated Meeting, January 24, 1876.

DR. T. A. EMMET, VICE-PRESIDENT, IN THE CHAIR.

ON GLEET, AND ESPECIALLY ON ITS RELATIONS TO STRICTURE OF THE URETHRA.

THE President of the Society, DR. H. B. SANDS, read a paper upon the above subject, chiefly for the purpose of exciting discussion. The word gleet was used with a restricted meaning, and was regarded as indicating an imperfect or chronic gonorrhœa. The existence of other varieties of gleet, however, was not denied. A brief outline of the symptoms commonly attending this affection was given, and brief reference was also made to the methods of treatment employed for its cure. The pathology of gleet was next considered, and the opinion expressed that many surgeons have presented views which are exclusive and erroneous. In the first place, bearing in mind the sense in which the term gleet is used in the paper, what means have we for determining the pathology of the disease? Knowledge may be obtained from three sources: 1. Post-mortem examinations; 2. Exploration of the urethra during life; 3. Effects of remedies. Regarding post-mortem evidence, the views of Sir Astley Cooper, Rokitansky, Sir Henry Thompson and others were quoted, and the conclusion arrived at that the essential cause of gleet is a catarrhal inflammation of the urethral mucous membrane and its follicles; that stricturral narrowings are frequent; that when the gleet has lasted for a long time it sometimes happens that no pathological alterations can be seen.

It is interesting to notice that the lacunæ are quite commonly affected, and that the two portions of the urethra especially prone to chronic inflammation are the fossa navicularis and the bulb.

With regard to the evidence obtained by exploration during life, it was remarked that the endoscope had failed to fulfil the predictions of its inventor, yet was an instrument of value in determining whether circumscribed spots of inflammation exist along the course of the urethra. These patches have been found with greatest frequency in the bulbous portion of the urethra, and much stress has been placed upon them as a cause of gleet. They are, however, not to be regarded as the sole cause; and are absent in many of the milder cases. Exploration of the urethra by means of sounds should never be neglected in obstinate cases of gleet. But in using them, the fact must be borne in mind that the inflamed patches in the urethra are not always sensitive, and also that at certain parts of the canal a natural sensitiveness will be found. In certain cases the bulbous sounds are valuable aids in examination.

With reference to studying the pathology of gleet by observing the effect of remedies, it was remarked that certain cases are cured by the application of stimulating ointments to the fossa navicularis, perhaps in others as far back as the bulb, and that the frequent success attending topical applications points to a disease of a catarrhal character. In certain rare cases cure is spontaneous. The conclusions were embraced under four heads:

1. Gleet depends upon a chronic inflammation of the urethral mucous membrane, either diffused over a greater part, or limited to spots, chiefly to the fossa navicularis and bulb.

2. Gleet depends upon inflammation of the lacunæ opening into the urethra.

3. Gleet depends upon stricture of the urethra.

4. Vegetations along the course of the urethra, inflammation of Cowper's glands, the prostate gland or the seminal vesicles, etc., are but rarely the causes of gleet.

Dr. Sands then proceeded to the examination of certain views respecting the pathology of gleet, which have for their able advocate his colleague, Dr. Otis. These views assumes that gleet invariably depends upon organic stricture, especially strictures of wide calibre, and that the division of these strictures by internal urethrotomy offers a safe method for effecting a cure.

Dr. Sands denied that the healthy urethra has a uniform calibre, which can be ascertained and measured with precision. It is necessary, also, to recognize what is meant by the term calibre of the urethra. The term calibre is ordinarily employed to indicate the size of a tube. But anatomists have long recognized the fact that the urethra is not a tube, except when distended. This is true of both the living and dead subject, as proven by amputations and post-mortem examinations. Being a canal only when distended, and having elastic walls, the calibre of the urethra will vary within certain limits, depending upon the elasticity of the walls and the amount of force used in separating them.

The normal calibre of the urethra is obtained when the latter is moderately distended by urine during micturition, and, although this cannot be estimated with accuracy, there is reason to believe that it is not large. Reference was then made to the various methods which have been employed for determining the calibre of the urethra upon the dead subject. Reybard found the greatest diameter to be 18½ mm. Several casts of the urethra were exhibited, which had been prepared by injecting the canal with wax. One cast was made by using only a moderate amount of distending force, and consequently was smaller than the other three, which were made by using such distending force as could be employed without producing rupture. Although it cannot be proved that the distending force in every instance was the same in amount, but assuming that it was nearly so, it is ascertained by this means that the dimensions of the male urethra, when dilated, vary in different individuals. The results obtained in these cases agreed with those of Reybard, and the figures showed that there is want of uniformity of calibre in different parts of the same urethra. This is an important fact, although not new. The figures showed that the urethra has alternating contractions and dilatations throughout its entire length, but this is tacitly denied when we admit that the calibre of the urethra is indicated by the calibre of the bulb.

Dr. Otis alone denies the existence of a normal narrowing of the meatus externus, and regards the presence of a narrow meatus as abnormal. Dr. Otis does not state, however, that he has ever demonstrated

this himself, but quotes Henle for his authority. Dr. Sands held, however, that Dr. Otis had misquoted Henle, and mistaken the exception for the rule.

To meet the objection that these observations have been made upon the dead and not upon the living subject, Dr. Sands has studied the subject with the same care upon the living subject, and has found the urethrometer designed by Dr. Otis a valuable instrument in conducting this part of the examination. But he has not been able to obtain the same results which have been recorded for the instrument. He has examined the urethræ of twenty healthy adults, and, with a single exception, expanded the urethrometer in the bulb of the urethra to its fullest extent, 45, without causing decided pain or inconvenience. In some of these cases he was unable to bring the instrument forward more than an inch before meeting with resistance. From this it was inferred that the bulb in the living subject is generally capable of greater dilatation than can be effected by the urethrometer at any other portion of the canal. Thus proceeding, Dr. Sands has satisfied himself that there are variations in different portions of the urethra corresponding to the variations obtained by injections upon the dead body.

The assumption of an invariable calibre for any urethra is unwarrantable, and liable to lead to grave errors in practice. Dr. Sands is convinced that a healthy urethra, explored by large bulbous sounds, will grasp the instrument tightly at certain points, thus giving the deceptive feel as though stricture is present. This may arise from a deviation of the sound from the axis of the canal; from spasmodic action of the fibres surrounding the mucous membrane in front of the instrument; or from slight inequalities not constituting stricture. He would not have it supposed that he did not approve of the treatment of stricture by means of internal urethrotomy, but believed it to be applicable chiefly to close strictures, and as an auxiliary to dilatation. He is a firm believer in gradual dilatation, as by far the best method of treating the majority of urethral strictures. Finally, the use of sounds exceeding 25 mm. is very rarely necessary either for diagnosis or treatment of stricture of the urethra. Because the canal can be distended to a much larger size, it does not prove that it should be so dilated. The practice of slitting up the meatus is irrational. A sort of artificial hypospadias is produced, and except in special cases it should be left as it has been made by nature.

The paper read by Dr. Sands being before the Society for discussion,

Dr. F. N. Otis remarked that it was with pleasure that he appeared to discuss certain questions which had been brought forward by the President. For their were certain points upon which there was no disagreement between himself and Dr. Sands, and there were certain other points upon which they were very greatly at variance. Reference was then made to the manner of preparing specimens to aid us in the study of urethral conditions, and Sir Henry Thompson was cited as authority for the statement that all methods of examination upon post-mortem specimens are utterly valueless, as far as they furnish any aid in appreciating the condition of the urethra present during life. Dr. Otis then referred to the examination of 100 cases in the living subject, made within the last month by means of the urethrometer, and in the presence of Drs. George A. Peters, Stephen Smith, Bull, Bangs, and others. In these examinations it was shown that the bulbous portion of the urethra is the largest, and that through the anterior portion of the penis the instrument passed smoothly along to the meatus through a canal of practically a uniform size.

Now this was the invariable history and condition of every case examined. It was proved during these examinations that the urethra in every case was an individual part of the man, as much as the foot or hand, and that there could be no positive standard in estimating the calibre of the human male urethra.

Again it was demonstrated that there was a constant relation between the size of the penis and the urethra with which it was associated. By the term constant is simply meant a sufficiently trustworthy and exact guide to the urethral calibre for surgeons unable to avail themselves of the use of the urethrometer. Out of twelve consecutive cases, the proportionate relation was found to vary not more than 2 mm. in any given case. These examinations were made upon men who claimed never to have had venereal disease. The Doctor stated that in seventy-one out of the ninety-five cases, the relative proportion was within 2 mm. When the difficulties attending and surrounding an examination are taken into consideration, any plan of measurement which can show such results is worthy of consideration, and must be acknowledged to be of the greatest possible value if a more accurate method of examination is not at hand.

Dr. Otis did not regard the size of the external meatus as a guide to the size of the urethral canal, as stated by Dr. Sands; because the meatus is found of such variable size, that it is impossible to determine where we shall stop and say that we have a normal condition. A man may have a very small meatus, and yet never suffer any inconvenience as long as it remains unaffected by disease. It deviates from any assumed normal type, but it is a deviation, and is not of necessity abnormal. But if such a meatus becomes involved in inflammatory trouble it may give rise to serious consequences, not only with regard to the existing disease, but with regard to subsequent reflex disturbances. A contracted meatus is the almost invariable associate of gleet, and when the contraction is removed the gleet usually gets well quickly, while a meatus corresponding with the size of the urethra behind it, gave assurance that gleet would not follow in an acute urethritis.

Dr. Otis maintained that Henle's illustration of the peculiarity of the urethral orifice was repeated in his book in three separate and distinct places; that he had put forth his views not to show that the meatus indicates the size of the canal, but, on the contrary, to show an entirely different part of the construction of the organ; and that although in the text of his book he has made the statement that the meatus is the smallest part of the canal, thus confirming the idea which has been handed down from one generation to another from the earliest times, yet his transcripts from nature give a distinct denial to his claim, and confirms Dr. Otis's statement with regard to the correspondence of the meatus with the fossa navicularis, as he had previously claimed that Henle's illustrations proved. Reference was then made to the variation in size of the external meatus in the 100 cases examined, and they were found to measure in mm., 12, 15, 16, 17, 18, 20, 25, 26, 27, 34, 37, etc.; and the Doctor regarded it as impossible to pick out of these what should be called a normal standard. Several individuals were then brought forward, in which the size of the meatus corresponded to the size of the fossa navicularis, and at the same time showing the constant relation before claimed between the size of the penis and the urethra with which it was associated.

Dr. Otis wished it to be distinctly understood that

he did not regard the size of the bulb as the size of the urethral canal anterior to it. He had always recognized it as the largest part; also that there is a narrowing, between two and three inches from the bulb, of two or more millimetres, but that the *spongy* portion and fossa navicularis he had found practically of a uniform size where there is no disease, and that is the part which he always measures to estimate the normal calibre of the canal. He has also come to regard the little ridges which are encountered a short distance in front of the bulb in a healthy urethra, which feel very much like strictures, as folds of mucous membrane which are straightened out during erection, and very likely during micturition and ejaculation. This conclusion was arrived at from a case in which erection took place during the examination, and which was subsequently examined in the flaccid state.

Dr. Otis made the statement that the frequency of strictures at this point might be explained by the liability of the retention of solid constituents of the urine, during some urinary disturbance, in these folds, which finally result in their thickening and consequent contraction.

He also alluded to the use of the urethrometer as a delicate surgical operation, requiring skill and experience in order to obtain uniform results; and stated that in the 100 cases the sensation of fulness was experienced by the person under examination before the instrument indicated a circumference at that point of 40 mm. With regard to Reybard's experiments, they were made upon the cadaver, and the distending force was repeatedly carried up to the point of rupturing the mucous membrane; and Reybard himself states that after rupturing the mucous membrane the tissues of the corpus spongiosum are much more distensible.

Dr. Otis doubted whether any advantage was to be gained by a distention of the urethra by means of the urethrometer above a mere sensation of fulness. His object has not been to make urethræ larger than nature has intended; it is simply to appreciate them in their variations, and to appreciate the obstructions to which they are subject.

The Doctor then alluded to serious difficulties which might depend upon a stricture which will admit 28 or even 30 of the French scale, such as gleet, abscesses, from follicular inflammation, reflex disturbances, etc. Swelled testicle and inflammation of the bladder may depend upon strictures through which an instrument of 24 French scale can be passed with complete ease, and without such instrument conveying the slightest idea of an abnormal condition of the canal; thus squarely taking issue with the statement made by Dr. Sands, that an instrument 25 mm. in circumference is sufficient for diagnosis and treatment of urethral difficulties.—The hour for adjournment having arrived, further discussion of the subject was postponed to the next stated meeting of the society.

Physiology and Pathology of the Brain.—Dr. Eugene Dupuy, of this city, well known for his researches into the physiology and pathology of the brain, and a late assistant to Dr. Brown-Séquard at the Paris Faculty of Medicine, lectured, on January 24th, in the College of Physicians and Surgeons of Philadelphia, on some points of cerebral pathology. He very satisfactorily demonstrated, by analysis of cases and by interesting experiments, that the theories which have been prevalent since the works of Hetzig and Ferrier have been published, are not tenable, viz., that localization of functional centres in the brain is impossible.

Correspondence.

STATE EXAMINATIONS.

To the Editor of The Medical Record.

Sir:—Allow me to make a few comments upon your recent editorial on State Examinations.

In the first place, if we are to have State Examining Boards, the State, which will be largely benefited thereby, should have some interest in the matter. The object, as I understand it, is not merely to purge the medical profession of ignoramuses, but to protect the public against pretenders in any and every system of medicine. To this end the law should provide for the examination of regular and irregular practitioners. In order to prevent favoritism, the appointment of examiners should be in the hands of the Supreme Court and the State Medical Society of each State, *but not in the colleges*. The latter will always be sufficiently represented by their members in the State Society. An *auxiliary* board, consisting of one examiner on Practice and one on the Materia Medica of each irregular school, might be so appointed that practitioners of any system of medicine could be examined by the board. The colleges could confer their degrees as usual when authorized by a mandamus from the State Board, but I can see no advantage to be derived from changing the wording of diplomas. As to the number of examiners, seven would seem to be unnecessary; three to five are found sufficient for the examining boards of the army and navy, before both of which the ordeal would probably be as severe as that of any State board.

A *per diem* compensation might be open to the suspicion that the time of examination could be unnecessarily prolonged, but a fair remuneration—not less than $5,000 a year—may be provided, in the following manner: Let each matriculant pay into the State Treasury the usual graduation fee of $30 (to be returned in case the student fails to pass), and if the amount thus collected be insufficient for the stipends of the examiners, let the State supply the deficit. This plan would give an *independent, disinterested* examining board, free from all connection with the schools, and removed from all suspicion of favoritism and unfairness by its peculiar mode of appointment, and the fact that it represented all the schools or systems of medicine licensed by the State. It does no violence to the present college system of examinations (as at Harvard, for example), nor interferes with their ancient right to confer degrees,—it leaves *teaching* to the schools, and only requires the final examination to be made by the State Board, whose mandamus should be issued for the degree.

E. N. R. O. B. E. L. C.

December 6, 1875.

CHANGES IN THE PUBLIC SERVICE.

ARMY.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from Jan. 23d to Jan. 29th, 1876.

McCormick, C., Surgeon.—Relieved from duty as Medical Director Dep't of California. S. O. 15, A. G. O., Jan. 21, 1876.

Keenly, C. C., Surgeon. To report to the Cond'g

Gen'l Dep't of California, for assignment to duty as Medical Director of that Dep't. S. O. 15, c. s., A. G. O.

Williams, J. W., Assistant Surgeon.—Leave of absence still further extended one month. S. O. 15, c. s., A. G. O.

Merrill, J. C., Assistant Surgeon.—Assigned to duty at Fort Brown, Texas. S. O. 9, Dep't of Texas, Jan. 17, 1876.

Hall, William B., Assistant Surgeon.—Assigned to duty at Fort Wrangel, Alaska Ty. S. O. 6, Dep't of the Columbia, Jan. 11, 1876.

Medical Items and News.

Quarantine.—The Assembly Committee appointed last winter to investigate the management of the Quarantine, Immigration, and Health Officer's Departments have presented a lengthy report, in the course of which they recommend the abolishment of the Board of Quarantine Commissioners:

The unwieldy board referred to has not for at least three years been called together, so that practically the Health Officer has had complete control over the important question of expenditures for salaries. The power of auditing bills contracted by the Health Officer might as well be exercised by the Comptroller. As to the custody of the property of the State, we submit that the Health Officer could very easily take charge of, and act as the custodian of, the property of the State, without any expense to the State. Therefore, we are of opinion that the office of Quarantine Commissioners should be abolished; that the powers now vested in the Commissioners be devolved upon the Health Officer; that a Board of Appeals, consisting, for the time being, of the Presidents of the Chamber of Commerce, of the Shipowners' Association, and the Board of Health of the City of New York, be constituted to serve, without compensation, for the purpose of deciding appeals from the decisions of the Health Officer; that the Health Officer pay the salaries of all employés in quarantine out of the fees collected by him; that all bills for repairs be contracted by him only, with the assent of the Comptroller, and paid by the Comptroller out of funds appropriated for repairs; that hereafter no appropriation be made for the maintenance of quarantine, except for necessary repairs; that the money earned by the State's boats in quarantine for the transportation of passengers and mails, and that derived from the care of the sick on Dix's Island, be accounted for and paid by the Health Officer to the State.

Aix-les-Bains.—Sir Dominic Corrigan, Bart., M.D., contributes some very interesting observations on the above in the December number of the *Dublin Journal of Medical Science.*

Material for Dissection.—Charles Scheffler has contracted to bury dead Chicago paupers for $1.40 each, and says that he means to sell the bodies for dissection. He argues that there is no law to prevent the business; that the burial, after the doctors are through with the corpses, will fulfil the contract, and that the plan will save money for the city, inasmuch as in no other way could a contractor do the work at the price.

The late Dr. Anstie.—In the London *Practitioner* for January, 1876, appears a memoir of the late Dr. Francis E. Anstie, by Thomas Buzzard, M.D. In the course of the admirably exhaustive history of the life and services of the lamented deceased, his biographer says:

"Some of the experiments which he performed were attended with considerable personal risk. On one occasion he fastened to his face an inhaler, containing an ounce of ether, placed his watch before him, took a pencil in hand, and began to make a mark upon a piece of paper on the lapse of every fifteen seconds. He soon lost consciousness, and when he could again distinguish his watch he found that thirty-five minutes had elapsed, and that he had made but two marks on the paper. He was alone during this experiment. Another time he took a grain and a half of very good extract of belladonna on going to bed, and woke in a state of delirium."

The Rank and Pay of Army Surgeons.—The bill of Senator Logan, now before the Committee on Military Affairs, provides that the number of assistant surgeons now allowed by law shall be reduced to 125; that the office of medical storekeeper is abolished; that from and after the passage of this act, in addition to the grades now allowed by law, there shall be four surgeons with the rank, pay, and emoluments of colonels; eight surgeons with the rank, pay and emoluments of lieutenant-colonels, to be promoted by seniority from the medical officers of the army.

Ulcerated Nipples.—M. Legroux (*Annales de Gynécologie*, Nov., 1875) advises the following treatment: Spread with a camel-hair brush a layer of elastic collodion around the nipple, in a radius of an inch or more; a piece of gold-beater's skin should then be placed over the nipple and collodion, taking care to make a few holes with a pin over the part of the gold-beater's skin which covers the nipple, so as to allow the milk to ooze through. No collodion should be spread on the nipple itself, as more pain might thereby be occasioned. By the rapid evaporation of the ether the collodion dries up and the gold-beater's skin adheres. The nipple is thus more or less pressed down by the latter, which in drying becomes tense. When the child is to be nursed, the end of the nipple should be wetted with a little water. The covering of gold-beater's skin becomes soft and supple, allows the nipple to swell, and protects the ulcers and fissures from the pain of suction. The mother or nurse thus suffers no pain, and the ulcers heal in a few days.

Postural Treatment of Palpitation.—A correspondent of the *Union Médicale* calls attention to the fact that palpitations, when not depending on organic disease, may be almost immediately arrested by bending the head downward, and allowing the arms to hang pendant. The effect is still more rapidly produced by holding the breath for a few seconds while the body is in this bent position.

Anti-Vaccination.—Dr. H. F. Germann, Prof. of Medicine, University of Leipzig, has just published a ponderous volume of one thousand pages on the subject of compulsory vaccination. Among other things Prof. G. claims that the scientific side of the vaccination question has not yet been so fully investigated as to justify any compulsion.

Weekly Bulletin of the Meetings of Medical Societies.

Monday, Feb. 7.—N. Y. Neurological Society; Notes on Clinical History of Chorea, by Dr. J. C. Peters.

Tuesday, Feb. 8.—East River Medical Association.

Wednesday, Feb. 9.—N. Y. Pathological Society.

Thursday, Feb. 10.—Brooklyn Pathological Society.

Friday, Feb. 11.—New York Medical Journal Association.

Original Communications.

DIPHTHERIA.

CONDENSED FROM LECTURES DELIVERED IN JEFFERSON MEDICAL COLLEGE, ON MAY 13TH, 17TH, 20TH, AND 24TH, 1875.

By J. SOLIS COHEN, M.D.,

LECTURER ON LARYNGOSCOPY, AND DISEASES OF THE THROAT AND CHEST.

PART II.

PROGNOSIS.

THE prognosis is usually grave in diphtheria. Many cases progress to a favorable termination, but such a happy result cannot be positively predicated in any given instance, for those which are mildest at the outset may yet terminate fatally. The character of the epidemic, the hygienic conditions by which the patient is surrounded, and the opportunity that may exist for improving those hygienic conditions, all exert more or less influence on the general prognosis. We should hope for the best, and be prepared for the worst, in every instance; bearing in mind that no case, however trivial it may appear, is absolutely unimportant. Cases mild at the outset, may become severe at a later period; and relapses may occur even after the first subsidence of the alarming symptoms. The age of the patient is to be taken into consideration. In the absence of any other prominent indication, we find that the case is generally more unfavorable the younger the patient.

The general state of the constitution is of great importance. Previous general good health renders the prognosis favorable; while patients debilitated from any cause whatever are less likely to recover. Complications with other diseases, as measles, scarlatina, or pneumonia, render the prognosis unfavorable.

The deposit itself sometimes furnishes indications of the severity of the case; but by no means constantly. Simple tonsillar or pharyngeal (oro-pharyngeal) exudation alone is less grave than when complicated with naso-pharyngeal, nasal, or laryngeal exudation. When the tonsils are sheathed, as it were, in an envelope * of exudation, it is sometimes indicative of a condition in which laryngeal exudation is likely to occur; and the prognosis is therefore less favorable. Mild cases, however, in which there is but little deposit, may prove fatal by blood-poisoning, or by collapse before the local manifestation has become fully developed. Septic cases (so-called), and cases actually gangrenous, are exceedingly grave; the latter not only from the ulcerative processes that takes place, but from increased element of poisoning carried into the system by each inspiration over the fetid detritus in the throat.

Nasal diphtheria is of such grave augury that some observers consider it of fatal significance, though without sufficient reason therefor. In children at the breast it interferes seriously with nutrition. Epistaxis, therefore, and even moderate coryza, should attract prompt attention, as indicative of nasal complication.

In his letter to Drs. Blache and Guersant,† in referring to the terror felt by the former and by Trousseau at witnessing sudden loss of life after forty-eight hours' illness, Bretonneau asserts that he had recently acquired the conviction that the disease is developed in the nostrils and extends there without any warning and without any apparent symptom. He therefore urges that visible symptoms should not be waited for, but that, at the least sign of snuffling, at the slightest indication of coryza, swollen lymphatic glands should be felt for, not merely looked for, beyond the angle of the lower jaw, below the lobe of the ear, and thence down the sides of the neck. At the same time the upper lip will be found red below the nostril of the same side on which there is any glandular swelling, and unequally and proportionately upon both sides, if there is glandular swelling upon both sides.

Pain in the ear is mentioned by Bretonneau as an early symptom in one of his cases;* and by Dr. Beardsley, of Milford, Conn., as the first symptom in almost all the cases he saw in an endemic; occurring a day or two before any other complaint was made, and before any evidence of exudation could be detected in the throat.† I have observed the same fact in a few instances, and not only in diphtheria but in other inflammatory processes involving the tonsils, posterior palatine arches, and epiglottis. It is characteristic, perhaps, when present, but not pathognomonic.

Epistaxis, and so likewise hemorrhage from the throat, is sometimes indicative of blood change, as well as simply direct loss from destruction of tissue; while, when copious, this direct loss of blood itself is an additional complication of unfavorable omen. Irregular cutaneous rashes and eruptions, spots of ecchymosis and purpura, are likewise of unfavorable augury. Laryngeal diphtheria (diphtheritic croup), and with it, of course, diphtheria of the air-tubes from larynx to ultimate bronchi, is of the gravest significance, for it indicates the approach of mechanical impediment to respiration, a condition which can but add to dangers already existing. As far as the mechanical danger alone is concerned, the constitutional condition may be almost disregarded in the prognosis; the age of the patient, the relative calibre of the larynx, and other affected air-passages, and the tenacity of the morbid product, being points of much more importance.

During the first week of the disease, in cases not directly fatal from innervation or collapse, the danger is from the larynx, and if the larynx remain unaffected, the danger then lies in the exhaustion and deficiency of nerve force or energy; conditions which may ensue even in connection with but a trifling amount of inflammation and exudation in the throat.

The tumefaction of the submastoid, submaxillary, and cervical glands is regarded by some observers as proportionately indicative of the severity of the case, on insufficient grounds, however, according to the opinions of others.

The constitutional symptoms of the disease itself furnish indications for prognosis. High temperature may be regarded as unfavorable. A strong, full pulse is a favorable indication; a rapid and feeble pulse, on the other hand, is an unfavorable indication; while a vacillating and infrequent pulse is almost of fatal significance, unless dependent upon cardiac disease previously existing. Loss of appetite and unwillingness to take nourishment are unfavorable signs. Vomiting is an unfavorable indication, and diarrhœa still more so. The presence of albumen in the urine is regarded as an unfavorable sign, and when the albumen is very abundant, the case almost always terminates fatally. Dr. Wade,‡ to whom we are chiefly

* Bretonneau, op. cit., p. 21, note.
* Fifth Memoir, op. cit., p. 196.

* Op. cit., Fifth Memoir, p. 201.
* D. D. Slade: Diphtheria, Its Nature and Treatment. Philadelphia, 1861, p. 45.
‡ Observations on Diphtheria. London, 1859.

indebted for the observation of this symptom, found that indications of the impairment of the renal functions were constantly precursory of an unfavorable termination. When the albumen is abundant, there is sometimes uræmic intoxication, and delirium is almost always a fatal sign.

In cases terminating favorably, recovery usually takes place from the eighth to the fourteenth day, the symptoms gradually diminishing in severity and urgency with normal resumption of impaired function.

In cases terminating fatally, death usually occurs within a few days, sometimes not until the end of two weeks, and sometimes as late as the fifth week. The patient may succumb to asthenia, or exhaustion from the severity of the systemic disease, with or without invasion of the larynx. Death from asthenia may occur during the first week in delicate or debilitated subjects, in rare instances within thirty-six hours; but it is usually delayed until the course of the second week. The patient may die from sudden asphyxia, or from gradual apnœa, caused by the local impediment or obstacle to respiration. Asphyxia may be produced by the flapping of free or partly free exudation in the trachea, or in the larynx, which, while it permits inspiration, effectually prevents expiration by its valve-like action. The patient may die from the innervation following the disease, even after the establishment of convalescence, or even after apparent recovery. Bretonneau has recorded cases,* and so have others after him, in which, though the symptoms were mild, life was often lost, and in which the post-mortem evidences (even after tracheotomy) were insufficient to account for the death. Bretonneau saw no case survive the sixth day of laryngeal symptoms, without tracheotomy. Jenner † has twice seen death within twelve hours from the time the laryngeal symptoms were first noticed, and had never known it delayed more than five days after positive indications of the existence of the deposit in the larynx.

If symptoms of laryngeal implication have not become manifested within the first week, the danger from this cause, though by no means averted, diminishes with the relative prolongation of the attack.

A point to which attention is called by Prof. Flint,‡ who had seen two cases terminate in this way unexpectedly, is a liability to sudden, fatal syncope; even in comparatively mild cases, or during convalescence; and generally due to some unusual exertion, as getting out of bed. Dr. J. F. Meigs, among others, has reported§ cases in which sudden or unexpected death was due to the formation of clots in the right cavities of the heart. Similar instances are not unknown to other observers likewise.

The prognosis in diphtheria, then, should always be guarded.

THE APPARENT IDENTITY OF DIPHTHERIA WITH CROUP.

The majority of practitioners, at the present day, believe in the identity of croup and diphtheria: but a very respectable and equally intelligent minority are unable to support this opinion. A consideration of the main points urged upon both sides of this interesting question cannot fail to be instructive.

A lively correspondence on the subject has occupied no inconsiderable portion of the columns of the London *Lancet*, and of the *British Medical Journal*, during the present year; and has elicited special attention, from the fact, among other things, that a prominent London teacher, Sir William Jenner, who contended for the non-identity of the two affections a few years since,* is now an advocate of the theory of identity, in which, by the way, he has the unqualified support of some of the ablest and most prominent authorities in Great Britain.

For the fair discussion of the subject, as definite ideas as possible should be conceived of the terms diphtheria and croup. The former term has been sufficiently dilated upon, and may be regarded as indicating positive deterioration of the blood, in addition to the local manifestations described. The latter term has unfortunately become applied to several conditions which bear no pathological analogy save in a single result, which may follow causes very different in their nature—inflammatory, septic, toxic, and mechanic—and this one manifestation is laryngeal stridor with mechanical impediment to respiration. Now, discarding, once for all, such varieties of suffocative affections as may be included under the terms "false" croup, "spasmodic" croup, "stridulous" laryngitis, "thymic" asthma, and the like, we are to ascertain whether there is an acute idiopathic inflammatory affection of the larynx, or larynx and parts contiguous, of an exudative or pseudomembranous type, propagable along the bronchial respiratory tract, and occasionally along the respirato-alimentary tract, non-contagious in its nature, unassociated with constitutional disturbance as an essential element in its phenomena, and in which the sole danger to life is mechanical obstruction to respiration from swelling, or from the presence or accumulation of the products of the exudation;—an affection the inherent tendency of which is to recovery, apart from the mechanical obstruction mentioned. Cases of this kind are not frequent, at the present day, I am willing to admit. Many practitioners practise a long while without encountering them; still they are by no means rare, and have been observed and recognized by many practitioners.† Gentlemen who have not encountered cases of the kind deny the existence of a true non-systemic croup, instead of simply stating that they have never seen the disease. These cases represent the true croup of those who believe in the disease independent of diphtheritic intoxication, and are classed as sporadic diphtheria by those who contend for identity. There is no doubt that many advocates of the existence of a true croup include undoubted cases of diphtheria in their category; while cases of supposed croup, on the other hand, are included in the categories of those of the contrary opinion. Hence much of the existing confusion as to what is a case of diphtheria, and what a case of croup. If we are willing to admit, as I think we safely can, that a patient with diphtheria may contract croup, and a patient with croup may contract diphtheria, this obscurity disappears in part. This is not mere begging the question. Typical cases differ as much as ever, but cases of coexisting disease partake of the nature of the two extremes, and the anatomical phenomena of both gradually merge into each other, while the clinical manifestations become blended. The existence of the one does not afford immunity, at the time or for the future, against the contraction of the other; and they

* Op. cit., p. 47.
† Op. cit., pp. 36, 37.
‡ Principles and Practice of Medicine. Philadelphia, 1868, p. 346.
§ Am. Jour. Med. Sciences. April, 1864, p. 395.

* Diphtheria: Its Symptoms and Treatment. London, 1861.
† I may mention, that at the close of the lecture in which the above remarks were made, a well-known physician informed me that he had followed me from my office to get me to see a case in consultation, which he had believed to be diphtheria, but which he now thought, from the tenor of my remarks, might be what I considered as true croup. I accompanied the gentleman to his patient, and found a case of croup, similar to the typical hypothetical case in the text. The case terminated favorably.

may appear together, or in rapid sequence, or they may follow at long intervals.

If the term croup is applicable to any inflammatory affection of the larynx, trachea, and parts contiguous, which is accompanied by the development of a product which when completed represents an adventitious membrane, then it appears to me that we have several varieties of croup:—

1. *Idiopathic or sthenic croup, true croup;* a purely inflammatory local affection, non-specific in its origin as far as we know, sporadic in its appearance, rarely implicating the tissues above the larynx, rarely occurring more than once in the same individual, confined almost exclusively to childhood, non-contagious, and unattended with any essential systemic complication; death occurring mechanically from asphyxia, or from slow apnœa, or from asthenia consequent on the impairment of vital force produced by prolonged impediment to respiration.

2. *Systemic croup, or the croup of diphtheria;* a systemic disease, specific in its origin to the best of our knowledge, accompanied and in part preceded by pseudomembranous manifestations in the pharynx, nares, and portions of the alimentary tract, often followed by certain characteristic disturbances in the nervous, circulatory, and glandular systems, frequently occurring more than once in the same individual, endemic or epidemic in its appearance although sometimes sporadic, contagious in its nature, and attacking people of all ages, though more frequent in children; the tendency being to death by asthenia, though it is likewise liable to prove fatal mechanically from obstruction of the air-passages.

3. *Deuteropathic croup;* such as becomes developed in connection with certain of the exanthemata, typhoid fever, and the latter stages of phthisis and other diseases of malnutrition, in which it is often associated with similar deposits in other portions of the body; therefore bearing a closer physical resemblance to the local manifestations of diphtheria: and

4. *Traumatic croup;* such as follows the local action of steam, acids, vesicants and mechanical injuries, the membrane, as remarked by Bretonneau,* remaining circumscribed about the injured parts.

Certainly a special diathesis or a special infection is not necessary for the mere production of false membrane. In all these instances, the membrane is diphtheritic in the sense of being adventitious, but, as we know, adventitious membranes may become developed under still other conditions, as from the local influence of irritant gases, local injuries, and the like. To add one more to the examples that have been reported from time to time, I have in my possession a number of fragments of membranes coughed up during two years, following a tracheotomy which I had performed for the extraction of a foreign body (beef-bone) which had remained in the trachea for more than two years; and the patient informed me that she had coughed up "such fragments of flesh" from time to time before the operation. There were no general symptoms indicative of the process of membranous formation or exfoliation.

The problem offered for solution is whether the first form is an independent disease, or simply a sporadic variety of diphtheria—the second form. That instances of the first form were known to the ancients under different appellations there is abundant proof.†

It is also evident that this form of disease is not identical with the so-called *gangrenous angina* which Bretonneau first discriminated as a special affection, and to which he gave the name *diphthérite*.

Bretonneau contended for the identity of croup and diphtheria, and believed* that "Francis Home persuaded himself that he had just met with an affection which had hitherto escaped the attention of his predecessors," and that his new name "so fascinated all persons that it prevented them from recognizing a disease observed from the most remote antiquity." At the same time Bretonneau states distinctly that "no inflammation with exudation is *diphthérite* when it does not spread by contagion;" the membranous exudation being considered by him as the poison itself.

The development of diphtheritic patches upon abraded cutaneous integument is universally known, whether due to a local deposit or to an exudation from the tissues. It is not improbable, at least in many instances, that the diphtheritic patches in the throat are first developed on abraded surfaces. There is usually some history of catarrh preceding the development of diphtheria. Now, this catarrhal inflammation of the laryngo-tracheal mucous membrane may produce an elevation or separation of the epithelium, and thus represent the condition of abraded integument. It is difficult, and sometimes impossible, to recognize slight losses of epithelium with the unaided eye, in the usual method of examining the throat, and the pharynx and parts contiguous to it may be in this abraded condition previous to the attack. Granting this, the two processes in the skin and in the mucous membranes are analogous.

Attempts at discrimination in the nature of the exudation have failed, although characteristic differences, chemical, microscopical, and physiological, are still contended for by some pathologists. The discriminating condition pointed out by Virchow some years ago, and so extensively supported, that the pseudomembrane of diphtheria is adherent to the mucous membrane, or infiltrated into it, while that of croup simply lies upon the mucous membrane, is now acknowledged by him† as lost in particular cases: true croup of the larynx and trachea invading the pharynx and often actually coexisting with diphtheria, and not presenting as a free exudation until we reach the deeper bronchi or the pulmonary vesicles.

We cannot establish any essential difference on anatomical grounds, the pathological products of the two affections being identical as far as our means of examining them are to be relied upon.

There is no absolutely characteristic manifestations in the location of the pathological product, nor in the condition of the mucous membrane beneath it; even destruction of tissue being sometimes encountered in croup as well as in diphtheria.

When we investigate the clinical features and manifestations of the two diseases, we can, I think, recognize a difference as tabulated below:

CROUP.	DIPHTHERIA.
Non-specific in origin.	Specific in origin.
Never contagious.	Often contagious.
Not inoculable.	Inoculable.
Not of adynamic type.	Of adynamic type.
Usually sporadic.	Usually endemic or epidemic.
Rarely attacks adults.	Often attacks adults.

* In the case of the prolonged sojourn of foreign bodies a permanent adventitious membrane envelops them and renders their retention harmless.

† See especially, observations tending to ascertain whether the ancients were acquainted with the disease known to us familiarly by the name of croup, by John Redman Coxe, M.D., Prof. of Materia Medica and Pharmacy in the University of Pennsylvania.—*Am. Journ. Med. Sc.*, Nov. 1828, p. 56.

* Op. cit., p. 4.

† Pathologie und Therapie, I., p. 282.

CROUP.	DIPHTHERIA.
Always accompanied by exudation.	Sometimes unaccompanied by exudation.
Fatal only by physical obstruction to respiration, whether directly or indirectly.	Often fatal without any physical obstruction to respiration whatever.
No depression of heart.	Marked depression of heart.
Pulse often strong and hard.	Pulse never strong and hard, even though quick and full.
Respiration more accelerated in proportion to the pulse; ratio rarely if ever less than one to four.	Respiration not accelerated in proportion to the pulse; ratio usually less than one to four.
Albumen rarely in urine.	Albumen often in urine.
Not followed by paralysis.	Often followed by paralysis.
Would bear antiphlogistics.	Would not bear antiphlogistics.
Rarely attacks more than once.	Often attacks more than once.

In addition to this, it may be mentioned that diphtheria, unlike croup, has never been thought due to excessive plasticity of the blood.

With regard to contagion, it may further be remarked that I know of no recorded instance of undoubted croup (such a case as would not be classed as diphtheria by these contending for non-identity) which has been traceable to exposure to the contagion of a case of diphtheria (such a case as would be designated diphtheria by the partisans of both views). Evidence to the contrary ought to be accepted as conclusive. With regard to the pathological product, it may be admitted that no one doubts that diphtheria may exist and even terminate fatally, without the development of any membrane in the larynx or below it. No one doubts either that the disease, to constitute croup, necessitates the production of a pseudo-membrane or its representative in the larynx or trachea, or bronchi. In diphtheria, too, the membranous affection in the larynx is secondary; and, on the other hand, croup does not necessarily affect the pharynx. Diptheritic cases may be mistaken for croup, and thus the two be regarded as identical, from there being evidences of membranous exudation in the larynx, but none in the pharynx; the fact being, as often demonstrated necroscopically, that the membrane had occupied localities out of direct sight, such as the posterior surface of the palate, the lower portions of the œsophagus, upper portion of the pharynx, and the like. Laryngoscopic and rhinoscopic inspection, when practicable, would set such doubts at rest.

In the same way as we have enteritis and typho-malarial enteritis, pneumonia and typhoid pneumonia, erysipelas and malignant erysipelas, we may have croup and diphtheria; the disease being due to an ordinary cause in the one instance, and to a specific cause in the other; the analogy being in the organs or tissues affected, and the difference in the mode of origin and in the systemic complication.

Uninflammable Fabrics.—The London journals are much exercised over an accident in the Alexandra Theatre, Sheffield, by which a ballet girl was burned during the representation of a fairy scene. The *Lancet* maintains that the fabrics of these girls should be made uninflammable by immersion in a solution of neutral tungstate of sodium mixed with three per cent. of phosphate of sodium, and that such a precaution should be enforced by law.

URETHROPLASTIC OPERATIONS

TO REMEDY

HYPOSPADIAS, EPISPADIAS, AND ALSO INCURVATION OF THE PENIS.

By J. W. S. GOULEY, M.D.,

SURGEON TO BELLEVUE HOSPITAL.

Some years ago I directed my attention to certain plans of operation to remedy congenital malformations of the penis, which, for lack of proper material, I could not carry out until the case narrated below presented itself. I think that these processes can be adapted to the three principal varieties of hypospadias, and also to balanic epispadias; and they seem to me more promising than those heretofore employed.

Balanic hypospadias, which is very common, has generally been considered too trivial to merit much notice, except it be attended with constriction of the urethral orifice, which then constitutes one of the forms of congenital stricture, and demands internal lateral incisions.* But there are cases in which, even after free internal division, sufficient irritation still exists to cause sundry derangements of the nervous system, and to annoy the patient in various ways, and in these scarcely anything short of an operation will give relief.

In September, 1875, a gentleman requested an opinion from me regarding the propriety of his being operated upon for congenital balanic hypospadias. He had already been subjected to several operations, all of which had failed. One, he said, had consisted in denuding the edges of the gap or fissure, and bringing them together with wire sutures. But before this last attempt, an endeavor had been made to "dig a canal through the glans penis." The appearance of the deficiency was similar to that represented at A (Fig. 1), the malformation extending a little beyond the line of the base of the glans. At about half an inch from the end of the penis, the fissure was traversed by a cord-like isthmus of mucous membrane about an eighth of an inch in thickness. This was the result of the "digging" just referred to, and through the foramen which resulted, No. 8 sound only could be passed, while the urethral orifice at the proximal extremity of the gap admitted a No. 15 sound quite easily. There was also a slight degree of incurvation of the penis in its last inch. I told the patient that I had declined to operate in several cases similar to his, because I thought the malformation too slight to cause more than a very trifling inconvenience, and that for the same reason I would, in his case, advise against an operation. But as he gave me to understand that this affliction was preying greatly upon his mind, and as he became very urgent that I should undertake to remedy his trouble, I finally consented to do so; but deferred the performance of the operation for a few days in order to mature the plan that I had already conceived tor cases in which the defect is more extensive.

On September 9th, 1875, assisted by Dr. Z. E. Lewis, I executed the operation in the manner herein described, after having had the patient etherized. As nothing could be gained by preserving the isthmus A (Fig. 1), and as it was really in the way, I snipped it in the centre, and its cut ends retracted to either side so as to be almost out of sight. I then made a longitudinal incision, beginning at B, and extending to C, and another parallel with the first, and a quarter of an inch to the ontside, from D to E, and the two were united by short cuts from B to D, and from C to E.

* See Gouley on Diseases of the Urinary Organs, p. 107.

The teguments were dissected off from all the space bounded by these incisions. This process was repeated on the opposite side. The mucous membrane and skin in all the central space, half an inch in breadth, more or less, included between the incisions B B to C C, from A to K, and beyond, were preserved intact. The incisions B C, B C, were about one-twelfth of an inch distant from the edge of the

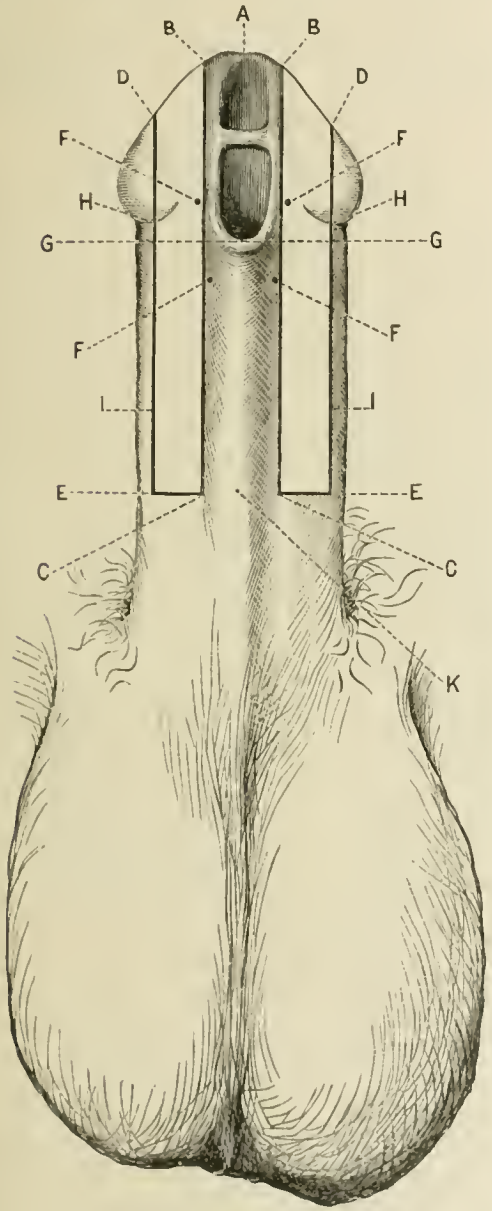


Fig. 1.

somewhat elliptical gap at its widest portion, and of course farther off above and below, being made quite straight and with a view solely to the necessary width of the new urethra. The next step consisted in gradually sliding the skin, so as to double it upon itself and bring the lateral denuded surfaces into apposition, to be so retained by a number of fine silken sutures in such a manner that C C would be united to B B. But to effect this I had to begin to stitch at F F, passing the suture from within outwards above, and from without inwards below, so that in folding the central skin which was to form the urethral floor, the angle or crease came at the point represented by the dotted line G G, as close as possible to the edge of the abnormal urethral orifice. Before tying the suture of one side, that of the opposite side was first passed, then the other threads were successively applied on either side, tied, and cut short, so that their free ends lay inside the newly formed urethra, until the last two, uniting C C to B B, were secured;—in all five on each side. Four additional sutures were passed on each side along the lines formed by the apposition of C E I to B D H. The stiching completed, the meatus became transverse instead of longitudinal, its inferior lip being the fold of skin from K, formed by the apposition of the points C C to B B, and its superior lip the edge of mucous membrane from B to B.

To prevent erections, ice-water dressing was used, and hyoscyamus and camphor given freely at night. The patient drew off his urine periodically with a No. 8 soft India-rubber catheter; each time, as directed, pinching closely the distal end of the instrument while withdrawing it. He followed so faithfully this latter injunction that not a drop of urine ever came in contact with the wound, which healed primarily. Some of the sutures were removed on the fourth day, and several others remained twelve days in the urethra, creating very little if any irritation, and were readily cut away.

Three weeks after the operation he indulged in the sexual act without any marked inconvenience, but thought that, during erection, the incurvation of the penis was somewhat increased, and determined to have this remedied by a second operation, which he underwent on October 16th, 1875. I made, on each side, through the integuments, an incision, beginning near the base of the glans—where the prepuce was quite loose, and resembled a pair of wings—and carried the cuts along the under-surface of the organ, upwards and inwards to the median line, a little beyond the proximal extremity of the newly formed urethra, where they were united, making a V-shaped wound. The central skin, which formed the floor of the new urethra, being thus liberated, was pulled forward as much as possible. The edges of the wing-like processes having been clipped, the skin was drawn back and stitched to the sides of the V in such a manner as to convert it into a Y. But as this produced a considerable degree of circumferential tension, I next made a longitudinal cut, an inch and a half long, only through the skin, on the dorsal aspect of the penis, and began to stitch it by bringing together its two extremities, and so converted it into a transverse wound, with the effect of completely relieving all tension, and at the same time of causing the organ to curve slightly backwards. The wounds healed primarily, except a small portion on the under surface which granulated. The patient was out in a week. His penis is now straight, and causes him no further anxiety or inconvenience.

A few weeks ago (January, 1876) I described my method of operating to Professor A. C. Post, who applied it to a case of balanic hypospadias, resulting from a phagedenic chancroid. The operation was entirely successful. The Doctor had proposed to open the urethra in perineo, in order to keep the urine away from the wound near the point of the penis, but finally concluded to adopt my simpler and safer plan of requiring the patient to pass all his urine by the aid of a

soft rubber catheter, introduced as often as his bladder required relief.

To avoid employing a major, as an auxiliary to a minor operation, is a surgical precept that should not be disregarded, and, in accordance with this doctrine, it would be as wrong to perform external perineal urethrotomy, with the sole object of preventing the flow of urine upon a wound made to remedy balanic hypospadias, as it would to first tie the brachial in order to control hæmorrhage from the digital arteries in amputation of a finger. These objections are, I think, in themselves sound and conclusive; but even if they were insufficient, there are other reasons why this measure should be condemned. The experience of past years has taught that the endeavor to turn the current of urine, at least for the first day or two, by making a perineal opening, is almost certain to fail. It is well known that during the first day after this

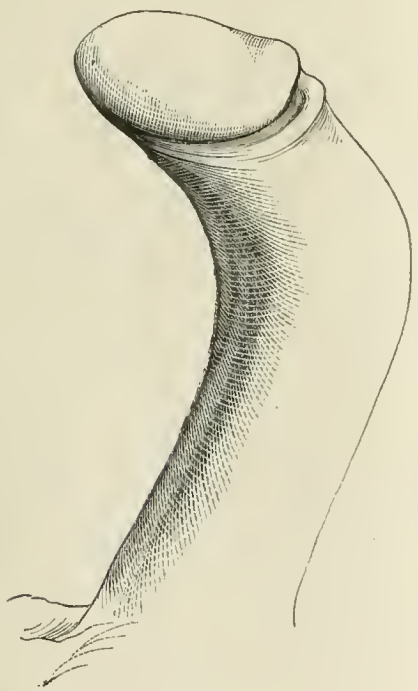


Fig. 2.

(Enlarged from Bouisson.)

operation the urine usually flows through the whole urethral canal, owing to contact of the swollen lips of the wound in the perinæum. But it has been said that this might be "obviated by a catheter passed into the bladder through the perineal wound, and retained in position." That a catheter so introduced and retained does not always prevent the escape of some urine through the whole length of the urethra, during the first twelve hours, has long since been proved by many excellent observers. Therefore, I venture to assert, and hope to maintain, that opening the urethra in perineo, as an adjuvant to this anaplasty, is worse than useless, since it constitutes not only a complication of some gravity, but a delusive procedure, calculated to defeat the very object which the operator may seek to attain, *i.e.*, to prevent the urine from contaminating the wound at the anterior extremity of the urethra, exactly as it would if it were voided spontaneously, or if it trickled beside a catheter passed through the meatus and retained in position.

In Dr. Post's case, where there is no incurvation of the penis, it is almost impossible to discover any traces of the surgeon's work. All that is observable is that the meatus is transverse, and that the prepuce, which has grown fast to the point of the penis, can be retracted only sufficiently to uncover the upper surface of the glans. If in this case there should be any tendency to accumulation of smegma, the prepuce could be slit on its dorsal aspect, or another operation could be done to construct a new prepuce capable of partially covering the glans, and of being completely retracted. The operation would be so simple that I shall take no space to describe it.

SCROTAL HYPOSPADIAS WITH INCURVATION.

When, in the scrotal variety of hypospadias, there is such incurvation of the penis as to impede sexual congress, an operation should be done to straighten the organ, and subsequently a new urethra might be constructed. It must be evident to all who have carefully examined cases of congenital hypospadias with incurvation that the abrupt bend in the penis (Fig. 2) is due entirely to the defective urethra, which checks erection, as in the "chordee" of acute urethritis. To remedy this deformity, the operation ordinarily performed consists in cutting across the bridle-like urethra, and then applying such dressings as will ensure a curve in the opposite direction until the completion of the healing process; generally, however, this is unsuccessful. Bouisson, of Montpellier, reports a case* of this kind, in which he resorted to division of the bridle three different times; and though he severed it completely down to the sheath of the penis, and was very careful in the after-treatment, he failed each time. The reason of his failure is that he made a transverse wound, and when cicatrization was completed, the parts resumed their former condition. In point of fact, a transverse wound will generally leave things in a much worse state than before. I was so deeply impressed with this fact, from reading Reybard's account of his experiments to illustrate the effect of different wounds of the urethra, that I determined to contrive an operation for splicing, and so lengthening the short and curved urethra in hypospadias, thereby avoiding a transverse cut. Early in 1866 I saw two cases of scrotal hypospadias with great incurvation of the penis, which I thought fit for the operation, but circumstances prevented its performance.

The splicing process above mentioned was to consist in making a sigmoid incision to involve the whole thickness of the urethral wall to the sheath of the corpora cavernosa penis, from L to M (Fig. 3), and two lateral cuts from the base of the glands N N to O O, a little beyond the orifice of the urethra P. The sigmoid incision was to be made an inch and a half long, as the urethra was to be lengthened by an inch. As soon as the parts would be liberated, the traction made upon the penis, in the endeavor to straighten it, would bring together obliquely the edges of the sigmoid incision near its points L and M, which would take the position represented at R (Fig. 4), where a couple of fine silken sutures would be applied; then the edges of the long lateral cuts S T, S T (Fig. 4) would be stitched to the edges of the central portion, during which time an assistant should hold firmly the glans in such a manner as to curve the penis backwards. The diagram (Fig. 4) is drawn on the same

* Bouisson, Tribut à la Chirurgie.

scale as Fig. 3, and is intended to represent one inch of gain.

Ice-water dressing should be applied in such a case, and the penis drawn back upon the hypogastrium, or it may be guyed by a double suture passed through the point of the glans, and then through the skin of the pudic region, and so retained for three or four days. This is all I then intended to do; but now, the first operation succeeding, I would go a step farther, and in about four weeks afterwards would under-

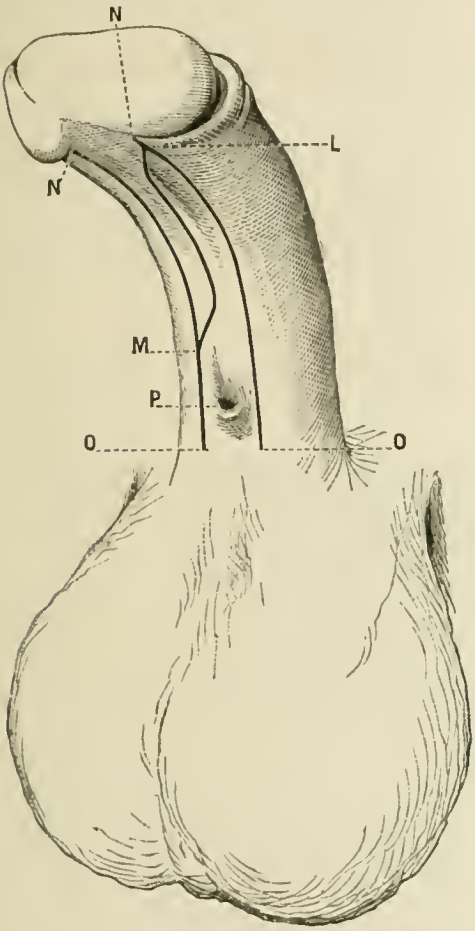


Fig. 3.

take to construct a canal from the orifice of the urethra P, in front of the scrotum, to the point of the penis, after the manner described for balanic hypospadias, but borrowing the tissues from the scrotum: that is, leaving intact a central quadrilateral portion of skin of sufficient dimensions, and making denudation on each side, and sliding and stitching, as in the balanic operation.

In perineal hypospadias, and in epispadias, the same principles can be applied, with such modifications as will be suggested by the particular condition of the parts in each case; always folding the skin forwards, and stitching as before described.

The method just detailed for lengthening mucous or cutaneous surfaces by splicing, can, I think, be adapted to anaplastics in various parts of the body, and also to operations for remedying certain deformities due to loss of substance from burns and other causes.

If, in the performance of the operations described above, particular attention be given to the following details, the chances of success will be greatly increased.

1. The vertical incisions B C, D E (Fig. 1), should be a little longer than the tissure to be closed. If the latter be an inch and a half long, the former

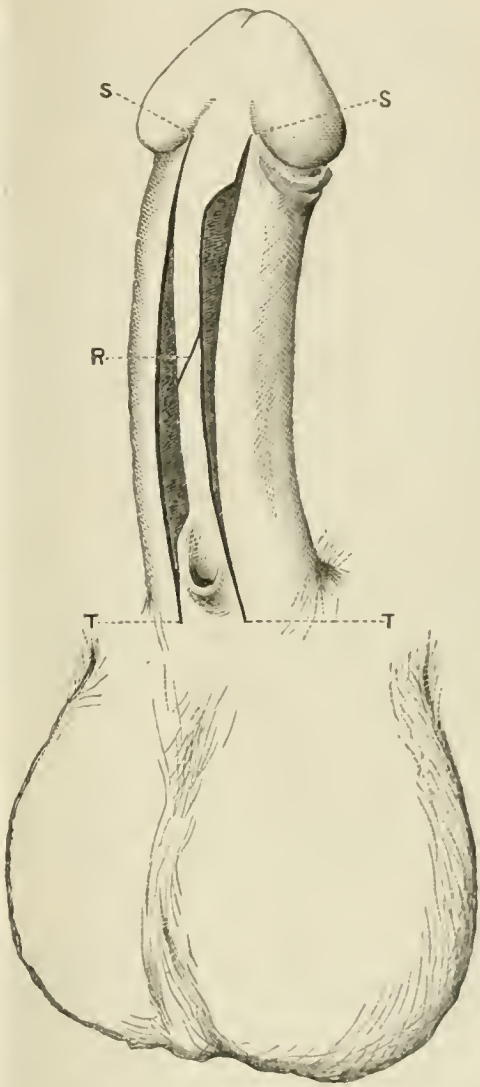


Fig. 4.

should extend a quarter of an inch farther back, to guard against any possibility of tension, and also to allow for subsequent retraction.

2. The denudation should extend a little more outwardly upon the glans, where the mucous membrane is less movable, than upon the body of the penis, where the skin is retractable by its own elasticity, owing to the underlying loose connective tissue.

3. Enough sound skin should be left in the centre, between the incisions B C, B C, from A to K (Fig. 1) to make a capacious urethral canal.

4. The mode of applying the sutures so that the knots may lie within the newly formed urethra is one of the most important features of the operation, and if the operator wishes to ensure apposition and rapid union of the parts, he should bestow no little care upon this step.

5. No catheter should be retained in the urethra, but the bladder should be emptied as often as required, by means of a soft India-rubber catheter not larger than No. 8 of the English scale. Great care, however, should be taken while withdrawing the instrument to pinch up its distal end, in order to prevent any urine from lingering in the canal or saturating the wound.

6. If the denudation be free enough, and apposition of the parts be effected, union, if not by the first, certainly by the second intention, may be confidently expected in the majority of instances.

7. In case of failure of the operation, the parts will probably be in no worse condition than before, and a second operation can soon be attempted.

8. In the operation for splicing the cord-like urethra (Fig. 3), and lengthen it, say by an inch, the sigmoid incision L M should be made about half an inch longer, to allow for retraction and also for the oblique position in which the ends of the flaps are placed (see R, Fig. 3). This incision should involve the entire thickness of the urethral wall, and expose the sheath of the penis, but care should be taken to avoid wounding the cavernous bodies. Any bands of connective tissue which might prevent the flaps from being slid in the right direction, should be divided, but the spongy body should be disturbed as little as possible from its bed.

9. The lateral longitudinal incisions S T, S T (Fig 3), should be made close to the edge of the urethra, and deep enough to expose the sheath of the penis; and in stitching them to the edges of the central portion traction should be made upon the penis, which should at the same time be curved backwards.

10. The second operation, to construct the new urethra, should not be attempted in less than four weeks.

311 Madison Avenue, New York, *February* 3, 1876.

ON A READY METHOD OF ADMINISTERING FLUIDS WHEN THE JAWS ARE FIRMLY CLOSED.

By F. A. BURRALL, M.D.,

NEW YORK.

A simple examination, which any one can easily make of his own buccal cavity, will show that posterior to the last molar teeth, when the jaws are closed, is an opening bounded by the molars, the body of the superior and the ramus of the inferior maxilla. If on either side the cheek is held well out from the jaw, a pocket or gutter is formed into which fluids may be poured, and they will pass into the mouth through the opening behind the molars, as well as through the interstices between the teeth. When in the mouth they tend to create a disposition to swallow, and by this method a considerable quantity of liquid may be promptly given.

I have used this plan for some time, and the simplicity of it makes me hesitate to present it in this article. At the same time I know it is new to some practitioners, nor have I seen it mentioned in any journal. It is one of those apparent trifles which are often very useful in practice.

Recently a patient whom I was attending during labor was seized with convulsions after the delivery of the head by forceps, and while the body, which was unusually large, was being extracted. Chloroform, which had been discontinued after the emergence of the head, was again administered, with the effect of controlling spasm. The unconsciousness of the patient had interfered with the administration of a dose of ergot, which should always, I think, precede the delivery of the placenta, and after the extraction of the body decided hemorrhage began.

As the patient partially revived, although her jaws were still firmly set, I poured the fluid extract of ergot mixed with water into the cavity formed by her retracted cheek and the liquid passing into the mouth was soon swallowed. The hemorrhage continued but a short time.

I have not found that liquids thus administered run into the larynx, nor do I think this is likely to occur if too much is not given at once. It is more probable that they would pass over the arched pavement of the tongue into the gutter beside the tongue and larynx.

It is not to be supposed that this method will always succeed, but it is worthy of a trial and can be tested promptly. Uses of it will at once suggest themselves to the physician.

Progress of Medical Science.

Non-inoculability of Phthisis.—In a paper read before the Académie de Médecine, M. Metzquer combated the well-known assertions of M. Villemin as to the inoculability of tubercle, and related experiments that gave contradictory results to those obtained by that observer. The latter is said to have killed his animals too soon, so that he was unable to determine from the evolution of the disease whether it was really tuberculosis or not. M. Metzquer, after producing exactly the same lesions, saw his animals recover after a longer or shorter interval, which he regarded as a proof that the lesions were not tuberculous. Moreover, lesions, to all appearances tuberculous, were found to be produced by inoculation of many other substances besides tubercle. M. Metzquer concluded, from 130 experiments, that the nodules developed by inoculation were not tubercular, because they were most frequently reabsorbed; because they could be produced by the inoculation of different substances, and, finally, because his experiments showed that the older the tuberculous material inoculated was, the greater was its activity; while, on the contrary, truly virulent substances succeed better when employed at a less advanced period of evolution.—*Journal de Médecine*, Dec., 1875.

Resin of Copaiba in Ascites.—Dr. Samuel Wilkes has tried this remedy for two years past, as a diuretic, and considers it of great value. The old objection to the use of copaiba is entirely done away with by using the simple resin after the nauseous oil is removed. In cardiac and hepatic dropsy its efficacy is undoubted, more especially in the former case. In a case mentioned, after digitalis, squill, and mercury had ceased to be effectual, the copaiba taken in doses of fifteen grains (made into pills), three times daily, removed all dropsical fluid in a few days. The excellent property of this drug is, that if it acts on the kidney at all, it acts at once. If the first or second dose does not display its diuretic effect, there is no use in persisting in it.—*British Medical Journal*, December 25, 1875.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, February 19, 1876.

HOSPITAL CONSTRUCTION AND ORGANIZATION.*

V.

How to temper and how to ventilate the model hospital are themes to which our authors very naturally devote much consideration. In private dwellings these are complicated problems. In hospitals such as this they involve most critical interests, and call for the astute study of the physicist, the engineer, and the physician.

Dr. Billings (page 44) and Dr. Jones (page 120) very properly give as a starting-point the meteorology of Baltimore. The former thinks there is need of artificial heat only about three months (page 19), and remarks that the real difficulty in ventilation will occur in warm, still weather. All the others seem mainly to be providing for cold weather.

Dr. Billings gives preference to heating by hot water on the low-pressure system, since air heated thus to 150° F. is more agreeable than when heated to over 200°, as it must be by furnace or steam radiators. He admits, as an objection, that you cannot moderate heat or overcome cold so rapidly as by steam radiators. He raises the question, whether separate boilers (page 19) for each building are not desirable. We are glad also that Mr. Neirnsée (page 339) gives his approval of an entire isolation of the heating apparatus for each ward, and also (page 360), in case of two-storied wards, makes a separation for each ward. Expense is probably diminished, and one of the most important conditions of isolation secured. Dr. Morris says (page 183) the warming and ventilation of each ward should be entirely independent and isolated. Dr. Folsom (page 59) places main dependence on heating by low pressure steam apparatus and indirect radiation. He has one general boiler-house in a separate building and at one extreme of the block (page 63). Dr. Jones advocates hot water on the low-pressure system, either (page 121) by a central heating apparatus for each building, or so as to supply the entire hospital. He strongly insists that wards should be of different temperatures, to accord with the varied conditions of disease (page 122). This seems to us best secured by separate boilers. In another place he gives approbation to all that is said by Parkes, in his Manual of Hygiene (page 376), in advocacy of hot-water pipes and radiating grates. Dr. Smith (page 313) claims that in Baltimore no elaborate system of heating can be required. He therefore does not elaborate a plan, but says either the fire-place or its principle should be adopted, or the ward should be warmed through an air-chamber heated by coils of steam-pipe, the latter method being spoken of as economical. From his remarks as to "machinery, care, and supervision on the part of attendants," we suppose him to mean a separate apparatus for each ward. He gives prominence (p. 312) to a heating of the floors and walls of the building by heated air, which reaches them after being warmed by steam-pipes in the basement. The walls also are warmed by connecting the interspaces with the lower air-chamber. Between the roof and ceiling he has also space for admission of this warm air. These fire-places help to warm the wards, and registers are arranged for special needs. It is well to compare all this with what we have said as to structure itself, and not make of it too much of an artificial heating and airing apparatus, and so interfere with natural processes.

The fire-place would only be possibly omitted by one of our authors, and he substitutes it (Billings, page 21) by a coil of hot-water or steam pipes. Morris (page 227) says that a hospital ward without a fire-place is radically and essentially imperfect. Where fire-places are prominently used, the plan of Folsom (pages 75-6) is excellent. Neirnsée (page 332) has a large open fire-place in every apartment of the Orphan Home, "besides auxiliary hot-water or steam heating —both systems of heating being combined with large air-flues for ventilation on the exhausting principle." He happily (page 338) recognizes the sun as a source of heat as well as light, and to be utilized. Most of the patent heat-mongers and routine hospital constructors assign it a very secondary place. We have thus many old and valuable suggestions, and spread ourselves before our old Baltimore heater in Calvert street, while our worthy trustees perspire over this temperature machinery. It will be noticed that dependence is placed upon no one system of heating, and our authors are suggestive and somewhat non-committal.

The bearing of heating upon ventilation is recognized as in most cases determining the source and method of heat. For instance, the fire-place seems as much vindicated as a ventilator as it is as a heater. It is

* HOSPITAL PLANS. *Five Essays Relating to the Construction, Organization, and Management of Hospitals.* Contributed by their Authors for the Johns Hopkins Hospital, of Baltimore. New York: William Wood & Co. 1875. 8vo, pp. 553.

true we have to bear in mind heat as a mode of motion, and also to remember that the difference of degree between outer and inner temperature is really the chief cause of currents and so of ventilation. But the fact is, in our vicious modern systems we come to endure too much artificial heat just because it is made the only dependence as the motive-power for ventilation. Heat is not as stifling as stagnant and impure air. We get to enduring and enjoying the former because it helps to rid us of the latter. It were far better to depend more upon some natural changing of air, or upon such artificial method as gives diffusion to currents independent of high heat.

We are in most of these plans striving too much after uniformity of temperature. We are very glad to find Morris (page 232) quoting these excellent sentences of Miss Nightingale: "Nature affords air to both sick and healthy, of varying temperature, at different hours of the day and night and season; always apportioning the quantity of moisture to the temperature, and providing continuous and free movement (of the air) everywhere. We all know how necessary the variations of weather, temperature, season are for maintaining health in healthy people. Have we any right to assume that the natural law is different in sickness? In looking solely at combined warming and ventilation to ensure to the sick a certain amount of air at 60° F., paid for by contract, are we acting in accordance with physiological law? Is it a likely way to enable the constitution to rally under serious disease to undercook all the patients day and night, during all the time they are in hospital, at one fixed temperature? I believe not. On the contrary, I am strongly of the opinion—I would go farther and say I am certain—that the atmospheric hygiene of the sick-room ought not to be very different from the atmospheric hygiene of a healthy house." Yet the great idea of the most of our artificial heaters is uniformity of temperature. In striving after this, the general result is a temperature too high. The variations that do occur are generally above 65°. A system of continuous parboiling results, which, like vice, after a time becomes endurable. Now, in such sick wards as these will be, most patients are in bed or have a bed readily accessible to them whenever desired. The bed is clothing, and itself affords facilities to the patient for regulating his temperature. The temperature of the inbreathed air is not the only source of heat to the patient. The fact is, wards are more apt to be accommodated to the sensations of attendants, who in night vigils and in their moving about are much more susceptible to cold than the patients in bed. Such persons should be clothed with special reference to their duties, and have over-sacks near at hand, so that a lower temperature can be prevalent.

Again, in most heating plans there is great omission to recognize the indispensable relation between heat and moisture which nature maintains out-of-doors, and which is so important to the sick inmates of hospitals. The degree of moisture needs to be accommodated to the degree of heat. If we use artificial heat we must also avail ourselves of artificial moisture. There is very little allusion to this point by our authors. Billings alludes to it (p. 20), although not explaining it in accord with physical and physiological action.

Absolute temperature is not the criterion of the caloric condition for breathing of the inspired air. It is important to know how far its capacity for moisture is met without the necessity of drawing upon each individual for the supply. "The moisture in the air," says Leeds, "is the great governor or regulator or conservator of heat." "It is like a soft invisible blanket constantly wrapped around us, which protects us from too sudden heating or too sudden cooling."

While excessive moisture is oppressive, excessive dryness is equally so. The state of invalidity in patients and the fact that the air is constantly being befouled by them more than by those in health, and that some of these foul gases have a different law of saturation from pure air, calls for astute investigation in this regard. While air passed over hot-water pipes does not largely lose its humidity at 60° or 65° F., yet in the condition of sick wards there is often need to add watery vapor. Carl Pfeiffer well says, "The most healthy state of the atmosphere can be obtained only when the dew-point of the air is not less than 10° nor more than 20° F. lower than the temperature of the room." The relation, too, of evaporation to the electric condition of every air needs to be studied, as urged by Hood. The uncomfortableness of very warm days is generally largely due to the air being saturated with moisture, and not to the absolute heat. Thus evaporation is interfered with. On the other hand, a very dry, hot atmosphere makes too heavy demand on the moisture within us, and is especially oppressive to the sick. There is need of constant testing as to the humidity of the prepared air of the hospital, and the hygrometer is as significant as the thermometer. The relation of the air inside and out to the dew-point must be constantly noted. The crawling foot-measure, mentioned by J. W. Draper (Text-Book of Chemistry), illustrates the significance of moisture, as does also Gardner, in his Medical Chemistry. Baked air is as deleterious as foul air. We have had occasion to use a portable hot-air furnace, and by extra water-pans, and by a water-basin of heated water hung in each register, or by water dripping from one to another, are able to modify the inspired air. The Winans method for moisture, as well as for heating, is worthy of careful study. In the climate of Baltimore we incline to fire-places and grates, as suggested by our authors, and to having for each ward in reserve a separated heating arrangement, by which air that has been heated by contact with steam or hot-water coils outside, may be introduced

into the ward when required. We believe a proper system of heating will yet come to introduce this heated air through many apertures, rather than through two registers to a ward.

The proper diffusion of heat probably also requires that it should both enter and have apertures for exit towards the floor, rather than the ceiling, or at least scattered about here and there.

Many of these questions must still be considered as *sub judice*, and upon them this hospital may aid in securing valuable information. The great trouble as to heating and ventilation as well, is that we have been depending too much on what we call the experience of doctors, architects and engineers. These are valuable as correlative and accessory. But many an architect gives a tasty plan and many a physician makes a good round through a hospital without their opinions being of much value, when from their noses and feelings they elaborate unlearned dicta as to the atmosphere within. This has to do with that close observation and record of science which belongs to the close sphere of physics. We want definite tests and experiments, such as Franklin made about electricity, or Wells on dew, and to depend upon series of authenticated experiments in the hands of skilled manipulators. We are glad to see this point alluded to by Billings (p. 32), and to be assured that it is easy to have a series of dials which will show at a glance the temperature and the amount of air passing through the various heat and foul-air ducts. To these we must add various kinds of hygrometers, barometers, anemometers, etc., and test moisture, rapidity and diffusion of currents, electric condition, and all those points now so well recognized as somehow bearing on health and on recovery from sickness. The remark made (p. 4) as to clinical observation has a wider range.

It is by the application of "instruments of precision and of graphic measurement" that we are yet to arrive at definite laws as to heat, moisture, ventilation, as to all conditions of inbreathed air, and come to know it in its bearings on household life.

We are equally concerned with the one who has charge of the heating of wards as we are about the apparatus. Tools are grand, but it is the operator that tells of their practical utility. We want an engineer who is also a scientist, and who will be as expert in all this department of natural philosophy as the surgeon is in applying the laws of human waste and repair. We notice that among the officers of the House of Representatives there is an engineer of ventilation at $1,800 per year; three assistants, $1,440 each; and six firemen of ventilation, each $1,095. We would just like to have them up for competitive examination before a board consisting of a professor of physics, a chemical professor and a practical operator we know. We would just like to know the results of their observations, and what evidence there is that what are called by them "observations" amount to anything scientifically, which means practically. We hope the trustees of Johns Hopkins Hospital will not so far adopt any one plan, but that under experts they may ventilate these subjects, and give us series of graphic observations, etc., which will cost no more than these, and result in determining questions of great concern to all valetudinarians.

In all this, too, it is ever to be borne in mind that each person properly handled is a heater, that all his garments are heaters, that the properly constructed hospital is a heater, that the chimney fire is a heater, and that the special appliances for heating are to be regulative and supplementary merely. The demand for them is by every possible means to be reduced to a minimum and then to be superintended by high skill, because the indication for use is so relative. Blessings be upon the men who in hospitals abate artificiality everywhere except so far as it supplements the ability and availability of elemental forces.

Heat is so much a mode of motion and therefore so correlative to ventilation, that it is difficult to consider the one separate from the other. When we come to inquire as to the modes of exit of the heated air, the two are inseparable. This relation in a hospital is practically all the more intimate, because, as Lanchester, in "How to Make Homes Healthy," remarks: "One result of the poisoning of the blood by impurity of air is the extreme susceptibility of the system to cold."

It must first of all be understood that nothing can wholly supersede natural ventilation, and hence windows, doors, chimneys and the ventilation through structure indispensable, so far as are consistent with avoidance of draught and a healthful temperature. In a country house where each room has a fireplace, or where a wrought-iron stove receives its air at the bottom from the room or from an outer tube and distributes it warmed above the cylinder, there need be but little trouble as to purity and warmth of air. Leeds, in his book on ventilation (p. 25), has well illustrated the simplicity and success of the arrangement, and also that some of the outcry about stoves is frivolous.

But in a hospital filled with abnormal conditions arising from continued occupancy by sick people, dependence cannot be placed upon natural ventilation, or upon the simple methods of country households.

Our authors treat ventilation *in extenso*. Billings guards the point that letting in and letting out air is not always thorough distribution, which is necessary to good ventilation. He associates ventilation with the heating, and claims that letting in the warmed air at the top (p. 22) and drawing out the air at the bottom secures the best diffusion, which, in common with Franklin, Leeds, etc., we very much doubt. The method of introducing and removing the air at the bottom as in Barker's ventilator, does not strike him favorably. He would introduce the air high up, or

both above and below (p. 30), and have an aspirating shaft so constructed as to suck out the foul air from the sides and corners near the floor. Ridge ventilation is also availed of.

Folsom (pp. 76 and 81) accomplishes artificial ventilation by a central chimney-stack, and by 12 ventilating ducts scattered about the ward near the floor in the walls, connecting with the chimney as an aspirating flue in the basement. On page 82 these openings are spoken of as beneath the patients' beds, and the process of admixture and removal of air described. Heated air is introduced by two registers alongside of the chimney-stack, the air being heated by a boiler and heated coils. The system is that of introducing heated air at the bottom, and letting it out at the bottom. The chimneys are helps both as heaters and ventilators, and there are two ventilators in ceiling for special use when required. The low specific gravity of the entering warm air is relied upon to carry it upward. It is then regarded as cooling, and descending along the walls so as to seek the apertures and obtain exit.

Jones (p. 122), besides fire-places, would supply the wards by fresh-air boxes heated by coils of hot-water pipes. He thus introduces the warm air at the bottom, as is more fully explained by Parkes. He leaves the breathed or changed air to escape by fire-places and windows, and to be disinfected by tar water. He is almost as enthusiastic over Berkeley's "Siris, or the virtue of Tar," as was Prof. Fraser, who calls it "the great work of the age on pure philosophy, and one which connects tar with the highest thoughts in metaphysics and theology." Dr. McCosh thinks otherwise, and says, "I cannot discover any higher logic than quacks employ in recommending their medicines." We like tar as a disinfectant, and value it more than some more popular smells, but still think more attention due to removal.

Morris (pp. 226–30) magnifies with enthusiasm the value of fire-places both for heating and ventilation, and with the Galton modification, by which cold air is introduced behind them, and heated so as to be used through apertures half-way toward the ceiling, he shows them to be largely available. He also would have similar flues in the side walls with openings at ceiling and floor, to be opened or shut as required, and to be used when there is no fire in the chimneys. He would secure a draft by connecting them above with a central smoke-stack. He would also have foul air removed upon the Barker plan near the floor.

In addition he would have heat supplied near the floor from steam-pipe radiators outside the wards, the same as other of our authors, with the difference that he prefers "high-pressure" as more easily regulated and more certain. He would have a fan provided to secure air to these radiators when needed, as it seldom would be.

Smith (p. 309) speaks of three kinds of ventilation: 1st. Natural, *i.e.* by windows, doors, and chimneys. 2d. Vacuum or exhaustion of air by heated shafts (aspiration); and, 3d. Plenum or fan propulsion.

He would rely entirely on natural ventilation in one-storied wards (p. 313), and combine vacuum and plenum ventilation in other structures. In the vacuum method he would still have the suction of foul air chiefly through heated chimneys. In the third the air is driven into the wards by a fan, being heated in winter and cool in summer. He does not specify at all at what points heated air is to be introduced or outlets provided. In fact, he relies so much on the warming of the structure itself, and on chimneys, as to leave the rest mostly to natural ventilation, and cautions against too elaborate apparatus.

He would have the wall-space warmed, and not depend much on inside ward arrangements, and does not discuss the bearing of this heated wall condition on inside ventilation.

Neirnsée (p. 332) relies on natural ventilation, fire-places, and large air-flues for ventilating on the suction or vacuum principle. His method of preparing and introducing heated air is by registers connecting with hot-water radiators below. He has (p. 360) a central chimney and ventilators in the basement of each ward, and by separate pipes for the smoke inside of the chimney makes of the rest of it an aspirator for drawing out the foul air of the wards through openings at the floor.

For summer ventilation all of our authors who refer to it rely upon the fan as most available when natural ventilation fails. It should be remembered, however, that the fan is applicable in colder weather as well as in hot weather, as a substitute for excessive heat, as a motor or ventilator. In the Kirkbride Asylum the fan is relied upon both in summer and in winter, and is spoken of as a substitute for the central chimney-stack or for fire-places. See Reports of Penn. Hospital for Insane, 1859, 1868, 1873, 1874, in which are many valuable hints on this subject. Because heat is so much a mode of motion, in most public buildings it is relied upon too much, and propulsion too little, for ventilation. Overplus of heat is more endurable than stagnant, foul air, and the occupants are refreshed by over-heat, not because it is good, but because it serves to diffuse, distribute, and expel the befouled air, and so is a constructive good. So at length the patients come to enjoy the contrast. It would be far better to get the same result without this lesser evil. Fans and housetop wind-mills, it may be, are yet to be studied very much as to ventilation. There are really but two methods of ventilation: that made by difference of temperature in adjacent strata of air, and that by mechanical forcing or disturbance of air. What is called the vacuum or exhaustive method by heat is merely making one body of air of different temperature from another, and so causing suction and distribution. The plenum or fan-propulsion method seeks to secure motion with a less degree of heat or mechanically. Natu-

ral ventilation partakes of the character of each. The fan, as used in winter, also serves to bring air more rapidly in contact with radiators, but we are not to lose sight of it as then combining ventilation by heat and mechanical action both. We are to study how much it can be made to do the one or the other in different proportion, according to the demand of locality and of the state of weather on any one day. The adjustment of all these plans to each other is the art of ventilation. The scientist defines with precision the laws. The expert being informed as to these laws operates the machinery, adjusts the relations, and then we get experimental knowledge. That we expect to get from Johns Hopkins Hospital.

As to the points for introducing warm air or propelled air, and the points for providing exit for used-up air, we are more and more led to the view that these should be many. Whether these apertures should be, some at the ceiling and others at the floor, or whether both should be below or both above, has been largely discussed. Our authors mostly incline to both entrance and removal near the floor. We think experiments have shown that Franklin was right in his stove theory, and that a room becomes equally warmed by the warm air spreading to the ceiling, and being displaced by new columns of warm air, and so circulating down the walls and through the room. If a ward is intensely foul we can see reasons why, at a great loss of heat, all heated air should be allowed to escape at the ceiling or by ridge ventilation, but, under usual circumstances, diffusion is safely secured by its removal upon descent. Really, however, the openings should be, for ingress and egress, neither above nor below, but all around. This whole subject of heating and ventilation needs to be restudied in its natural laws, and then principles applied with scrupulous exactness and with testing. Pettenkofer, in his lecture on "The Relations of the Air to the House we live in," says more in ten pages than most do in fifty, just because he tests principles, and is an experimenter in hygiene, instead of a mere nose-ologist as to the odor and purity of air. Our subjective impressions are sometimes of little worth. Give us a ward right in its structural composition, with windows, doors, and fire-places properly arranged, and some one with thorough sense to manage them, with such airing, sun heating, and cleanliness as may be secured, and in Baltimore the apparatus for heat and air need not be complicated. A wrought-iron portable heater in the basement, with proper adjustment of jacket air-space and pipes, costing $300, might shock the furnace foundries, but we could get good regulative heat out of it. Give us somehow a fan of simple construction, which could be worked when required, and communicate with the ward at various points, and out of it, too, in summer and winter, we could get ventilating comforts. If the walls are hollow, chimney-like flues through these, with a gas light somewhere in them, and a small fan arrangement inside, attached to a moving power, would make a draught in summer of much service. We think the subject of summer regulation in Baltimore needs far more study than the winter.

The relation of lighting to heat and ventilation has not been sufficiently discussed by our authors. A single French hospital has more than 1,000 gas-burners, and each gas-burner consumes as much oxygen and gives off as much carbonic acid gas as five persons. The amount, too, of heat is very great. The necessity of a right sort of burner, of a constant, subdued light at night, and of such lowering as will not cause imperfect combustion, needs attention. Lamps too often need to be used at bedsides. Great use can be made of gas-light and gas-heat for ventilation. The whole subject is treated by Hammond in his book on hygiene. His essay on construction of hospitals, like that of Lee and several others, is well worthy of study, beside those of our authors. Night vigilance over hospital heat and air is less operative than in the day-time, and patients often suffer greatly from conditions which are more carefully watched in the day patrol of physicians and wardens. We hope some day some Yankee will build a ward which will be divided by a movable glass partition easily raised, like an elevator, and only one half occupied by day and the other half by night. The beds could all be on an impervious platform on each side, and so attached to power outside, that at a given time the whole would move without a jar into the adjacent part, leaving each room alternately vacant.

This whole work brings us in its every section more and more to realize that the exactness of physics and of good housekeeping are the foundations of hospital success. The household system will yet come to be the prevalent idea of hospital construction and hospital management. We want a neat hospital village in which each classified kind of disease has its home. Then let it be regulated and administered as would be the household of a man and his wife who had twenty five relatives sick under their charge with one disease, and with ample means for proper nursing and care of them. This is the higher "secundum artem" we need, both as to construction and organization. The dusting of furniture and walls, the cleansing of wards and scrubbing only for soiled spots, the vacating of rooms as often *in proportion* as the good house-wife would have genuine house-cleaning, the proper airing of beds and bed-clothing, the regulation of transom windows and sky-lights and warmth—these and many other points not easily pencilled out in detail, but easily secured by the efficient housekeeper, these are the details of administration which to us promise more than one grand administrative building, with corridor connections to divers offsets, with general assembly-rooms for attendants, with an all-pervading heating and ventilating apparatus, and a sewerage which links them all into one.

In the notice of this valuable book we have been compelled to deal with suggestions rather than to enter upon discussions. and so have but imperfectly set forth reasons, and omitted much that waits to be said.

We have been compelled to pass over many points, such as furniture, chapel. amphitheatre, dead-house, autopsy tables. bedsteads, bath and water houses, fire-escapes, etc., because crowded out by more leading questions. We have studied these various plans among themselves and in compare with other sources of information, and welcome this contribution to the science of construction in general and hospital administration in particular. It is not wonderful that in so broad a theme some points should have been overlooked or dwelt upon too briefly, or that room should be left for other plans and modifications. We hope, and believe, that Johns Hopkins Hospital will be benefited by these essays of our authors, Billings, Folsom, Jones, Morris, Smith, and Niernsée, and will in its construction and orderings be so fortunate as to command the results of the closest science and the most taetile art. Engineers must study more than levels, and architects more than artistic effect and convenience. Physicians must get hold of the therapy of hygiene more wonderful than that of Materia Medica, and nurses know that their specialty can have no other foundation than a full knowledge of all the elementary branches of good housekeeping. Uniformity of plan must yield to classification and segregation both of disease, and of the attendants. Effort must be made to secure to each sick one a sheltering home, where in summer and in winter, by day and by night, art shall see that all vital and normal forces of nature have due play around as well as in the patient, and then only as handmaid give its kindly helping hand.

In this beautiful city, to which we are attached by other, as well as hospital memories. we shall watch with interest the rising of the model hospital, the model medical college, and the model university, as the devotees of education and of science watch any progress which means a higher standard of excellence and with it benefit to all humanity.

The endowment is in worthy hands, and the chosen president is skilful in organization and operation. With intelligent co-operation, and a zeal according to knowledge, an expectant people feel assured these gentlemen will well plan and well equip the uprising structures of this wonderful philanthropy.

The present number contains the concluding article on Hospital Construction and Organization. There were so many questions connected with the subject, and such an opportunity for discussing them in their application to the proposed model hospital of Baltimore, that we have considered it necessary to present them in detail. In order that no other material may be crowded out by the length of the article in this number, we have added some extra pages. Although averaging more than the usual editorial space devoted to such subjects, we hope that the general interest in the different topics may warrant the course pursued. These articles were originally written as an elaborate review of the work in question, but they so entirely accorded with our own views, that, contrary to our usual custom, we concluded to use them as editorial articles. It is but just to say in this connection, that the author is Dr. Ezra M. Hunt, of Metuchen, N. J., whose articles on House Hygiene and kindred subjects have attracted so much attention among sanitarians.

PHYSICIANS' PRESCRIPTIONS AND DISPENSING CHEMISTS.

So much depends upon the care and honesty with which our prescriptions are compounded by the apothecary, that every prescriber would fain believe that wilful mistakes or fraudulent practices are impossible. This is the charitable view of a question which has a very wide-spread bearing, not only upon the good of our patients, but the science of therapeutics in general. When a physician orders a certain quantity of a drug, he naturally expects that the order will be duly executed in every particular, and unless there is a palpable mistake in the dose of the drug, which makes poisoning possible, he does not appreciate the necessity of any comments, or any suggestions on the part of his compounder.

It would be well if all such expectations could be properly met, and there be no necessity for reflection upon the assumed high-mindedness of a certain class of so-called pharmacists. To the credit of the profession which they assume to represent, we are glad to know that they are few in number, but that these few exert a bad influence upon the majority of good men and true, who wish to cultivate the "prescription business" on thoroughly upright principles, is too apparent for comment. We have recently heard of apothecaries who not only openly criticise the prescriptions that may accidentally drift into their shops, but presume to substitute something which they consider better. Not long ago a well-known gentleman of this city, who has special reasons for prescribing large doses of quinine, wrote one of his prescriptions containing that drug. The patient, on presenting it to an apothecary in his neighborhood, was quite startled to learn that he was about to take a poisonous dose. Not satisfied with this comment, the compounder volunteered the advice not to take the medicine in the quantity ordered. This is but one of many instances of the sort which occasionally come to our notice, and to put the case mildly, might be looked upon as "unwonted interference." In the event of the prescription being accurately compounded, the patient is free to choose between the advice of his physician and that of his apothecary. If there were any doubt in the mind of an honorable apothecary as regards the safety of a

patient taking a large dose, the course to be pursued is so apparent that we hardly need refer to it. In all such cases of interference by the apothecary the physician generally protects himself from aspersions on his professional skill by advising his patients to go to another shop, and the difficulty is promptly and effectually remedied. If, however, the compounder chooses to go further, and either for the good of the patient, or what is more likely, for the good of himself, lessens the quantity of the drug in the prescription, or substitutes it for something which he thinks equally good, the physician and patient alike become the victims of the most despicable of frauds. The temptation for fraudulent dealing in this respect is particularly great when the ingredients of the recipe are very expensive. We have known that the substitution of one article for another is possible in the making up of prescriptions in some of the drug-shops of this city, but have no positive knowledge regarding the actual reduction of quantities of different articles ordered. That such things, however, may occur in well-regulated communities, we have proof in some recent developments concerning the doings of some of the apothecaries of Sheffield, England. It seems that some anxiety had existed on the part of the practitioners of that place as to the care and accuracy with which the prescriptions were dispensed. To test the matter, the inspectors of the health department presented to certain local druggists some prescriptions, which were so arranged that each should contain a full dose of some expensive remedy, capable of ready and accurate quantitative estimation in a mixture. Iodide of potassium was selected for that purpose, and in each of three prescriptions one hundred and twenty grains of the salt were ordered. While two prescriptions contained the full quantity, there was only seventy-six in the third. Of three samples which should have contained sixteen grains of quinine, one contained only nine and a half grains; and another sample, which should have contained forty grains, contained only thirty. The reduction in the quantities might have been much greater, but violation of the principle of fair dealing is the same, whether the transgression is great or small.

Concerning this particular case, *The Lancet* (Jan. 15) speaks as follows:

"It is, of course, wrong to tamper with or 'devil' any prescription, but when iodide of potassium or quinine, and a few other drugs whose actions are so thoroughly understood, are concerned, it is almost criminal. It may appear a strong statement, but there are cases in which a patient's life may depend on the quantity of iodide of potassium taken, and almost as much may be said in some cases in which quinine is ordered. Curiously enough, it is generally in those instances in which large doses of these remedies are ordered that it is of the greatest importance that the full dose should be administered."

Reviews and Notices of Books.

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M.D., Physician to the N. Y. Infants' Hospital, Physician to the Catholic Foundling Asylum, etc., etc. Enlarged and thoroughly revised. Phila.: H. C. Lea. 1876. 8vo, pp. 716.

This work took a stand as an authority from its first appearance, and every one interested in studying the diseases of which it treats is desirous of knowing what improvements are apparent in the successive editions. In the second edition a great amount of new material was added, including many diseases not alluded to in the first edition. The alterations in and additions to the volume alluded to were quite apparent, but with two or three exceptions in the present volume, the various additions and improvements are not noticeable to the superficial examiner. The principal additions to which we refer, and which will be the distinguishing features of the third edition, are the chapters on diphtheria, cerebro-spinal meningitis, and rötheln. The former disease is considered much more in detail than formerly, and a great amount of very practical information is added. The author is not a believer in the bacterian theory of the origin of this disease, but is inclined to the opinion that the development of micrococci is a consequence rather than a cause. This opinion is founded upon the fact that he has observed this micrococcus in abundance in non-diphtheritic exudations. The whole article on this disease has been virtually re-written, in order that the author's experiences in the late epidemics might be duly presented; and altogether it is one of the most comprehensive and one of the best written chapters on the subject that we have thus far read. His description of cerebro-spinal meningitis, founded also for the most part on personal experience, is admirably clear and exhaustive. His remarks upon rötheln are necessarily short, and are mainly confined to a notice of its anatomical characters as distinct from those of ordinary measles and scarlet fever, with both of which diseases it has sometimes been confounded.

Medical Diagnosis, with Special Reference to Practical Medicine, a Guide to the Knowledge and Discrimination of Diseases. By J. M. DaCosta, M.D., Prof. of Practice of Medicine and Clinical Medicine at Jefferson Medical College, Phila. Fourth edition, revised. Phila.: J. B. Lippincott & Co. 1876.

A fourth edition of this work has just been published, and as far as we can judge from a cursory examination of its contents, all the necessary changes and additions have been made to bring it up to the requirements of the present time. The principal additions have been incorporated in the chapters on nervous diseases and fevers. The work, as a whole, is in our opinion without a rival.

Lectures on Bright's Disease: delivered at the Royal Infirmary at Glasgow. By D. Campbell Black, M.D., L.R.C.S. Edin., etc. Phila.: Lindsay & Blakiston. 1875. 8vo, pp. 146.

This volume comprises a series of six lectures on Bright's disease of the kidney, delivered at the Royal Infirmary of Glasgow, and afterwards published in the *Medical Press and Circular*. In the present form they have been revised and amplified, and cannot fail to be

acceptable to every busy practitioner who has not the time to consult a large treatise. The subject is very interestingly, comprehensively, and practically treated.

TRANSACTIONS OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA. Third Series. Vol. I. Phila., 1875. 8vo, pp. 190.

ALTHOUGH a work of small size, it contains a large amount of very valuable material. The various topics discussed give the volume an attraction to almost every one interested in the curious things in medicine or surgery. Every one of the twelve papers published is worthy of a place in the volume, and amply repays a careful study. Having said thus much, we present our readers with the following list of the articles. I. Report of an Autopsy on the bodies of Chang and Eng Bunker (Siamese twins), by Harrison Allen, M.D. (illustrated). II. Case of Adenoid (Hodgkin's) Disease, etc., by James H. Hutchinson, M.D. (illustrated). III. Fracture of Neck of Scapula, by John Ashhurst, jr., M.D., etc. IV. New Operation for certain Cases of Cleft Palate and Bifid Uvula, by Wm. S. Forbes, M.D. (illustrated). V. Excision of Elbow, etc., by John Ashhurst, M.D. (illustrated). VI. Experiments on Laryngeal Nerves of Muscles of Respiration, etc., in a criminal executed by hanging, by W. W. Keen, M.D., etc. VII. Nitrite of Amyl in various Forms of Spasm, and its Value as an aid to Diagnosis, by S. Weir Mitchell, M.D., etc. VIII. Case of Acute Tetanus treated by Nitrite of Amyl, by Wm. S. Forbes, M.D., etc. IX. Remarks on Diabetes Insipidus, by J. M. Da Costa, M.D. X. Report on Surgical Considerations in regard to the propriety of an Operation for the separation of Siamese Twins, by Prof. W. H. Pancoast, M.D. (illustrated by chromo-lithographs). XI. Encysted Dropsy of Peritoneum, Suppuration, Abdominal Section, and Recovery, by J. Ewing Mears, M.D., with remarks thereon by Dr. Wm. Pepper. XII. Quinine as a Stimulant to the Pregnant Uterus, by Albert H. Smith, M.D. The present volume begins the third series, and contains the papers read before the College from April, 1874, to June, 1875, inclusive.

A TREATISE ON HUMAN PHYSIOLOGY; designed for the use of Students and Practitioners of Medicine. By JOHN C. DALTON, M.D., Professor of Physiology and Hygiene in the College of Physicians and Surgeons, New York; Member of the New York Academy of Medicine, etc., etc., etc. Sixth Edition, revised and enlarged. With three hundred and sixteen illustrations. Philadelphia: Henry C. Lea, 1875.

THE volume before us is a revised and enlarged edition of a work which has been used for several years as a text-book on human physiology. The reputation of Prof. Dalton as a careful teacher and methodical writer insures a hearty welcome to the present edition of his book, which contains fully fifty per cent. of new material. In taking a general survey of the work, we find that the arrangement remains preserved which obtained in the last edition; but as our comparison goes on by pages and chapters, we find that, in many places, the old text has been rewritten, as well as additions made such as were necessary to render it a fair exponent of physiological science up to the date of its publication. The successive changes which have been rung upon physiological problems within the last decade, especially upon those relating to the circulation, the lymphatic and nervous systems, have necessarily made the labors of the conscientious teacher and author most arduous. Even experts have been perplexed in their attempts to separate the few grains of truth from the huge pile of dirt and chaff which has been thrown out by European and American experimenters. Upon the labors of these experts, however, the medical student and the practitioner are obliged to rely for physiological sustenance. He, therefore, who embodies in a book that which can be easily digested and readily assimilated, and at the same time nourish, and can also produce material that shall stimulate and encourage without leading to positivism upon the one hand, or to regard physiological science as altogether uncertain upon the other, must have keen powers of discrimination and a filter which, unfortunately, every author does not possess. In this respect, however, we believe that the writer of the book before us has succeeded to a degree which will yield him the general approbation of the profession.

Prof. Dalton has discussed conflicting theories and conclusions regarding physiological questions with a fairness, a fulness, and a conciseness which lends freshness and vigor to the entire book. But his discussions have been so guarded by a refusal of admission to those speculative and theoretical explanations, which at best exist in the minds of the observers themselves as only probabilities, that none of his readers need be led into grave errors while making them a study.

So much for a general inspection of the work. We will now review it a little more in detail, and direct attention to a few, and only a few, items, which the reader, if he chooses, may regard as criticisms. We are not studying the book, however, as does an advanced physiologist when called upon to expend his powers of criticism, but are endeavoring to read it as does the earnest medical student and practitioner. We open the book at random, and find that we are brought face to face with what the author has stated regarding the anatomy of the organs of respiration. The first item that attracted attention was the failure to mention the ciliated epithelium in the anatomical description of the bronchial tubes.

A little farther along we came to the "movements of respiration." Under this head are discussed the movements of inspiration and the movements of expiration, and we are taught "that only a small portion of the air in the lungs passes in and out with each respiratory movement; and it will require several successive respirations before it can be entirely changed." Now just how the air in the deepest portions of the lungs is renovated is not stated. This is certainly an important physiological question, and we were disappointed in not finding some reference made to the agencies which are at work in that direction. While reading the same pages we became aware of the fact that the author has adopted the metrical system of weights and measures. Although this system has had the signet of English legality for more than twelve years, we believe that Prof. Dalton has erred in using it, just at present, in a text-book for students and practitioners, and that it will prove unacceptable to the majority of American readers. The author would have given incalculable aid to the general practitioner (who likes to find things in a nutshell), had he appended a table containing the value of the terms used in the metrical system, expressed in inches, ounces, pints, etc., etc.

In Chapter XII. are presented the theories of Denis and Schmidt with reference to the nature of the process of coagulation of the blood; but with the tact of a careful observer the author does not fully adopt or entirely reject either.

As we open the book again we notice that Prof. Dalton still adheres to the belief that the heart lengthens in ventricular systole. We had supposed

that this question was settled, and that it had been generally accepted as a fact susceptible of mathematical demonstration, that the ventricular cavities necessarily shorten during systole.

Again, we notice in the chapter upon the circulation that no reference whatever is made to the safety-valve action of the tricuspid and pulmonary valves, which is an item of considerable practical interest to the student of thoracic diseases.

The section devoted to the subject of reproduction contains one of the simplest, most elegant and comprehensive descriptions of this process to be found in the English language. As a matter of course these chapters could have been made much more elaborate, but they are sufficiently so to meet the demands of the ordinary medical student and busy practitioner. These are some of the suggestions noted while reading the sixth edition of this valuable treatise upon human physiology.

Transactions of the American Neurological Association for 1875. Edited by F. P. Kinnicutt, M.D., and T. A. McBride, M.D. Volume I. New York: S. W. Green, Printer, Nos. 16 and 18 Jacob Street.

This is the first volume of the transactions of a new medical organization, and contains the minutes of the proceedings, the constitution and by-laws, together with the papers read at the first session, and the discussions to which they gave rise. The volume contains 257 pages, and has been prepared with a care which entitles the editors to the thanks of the Association. The plates accompanying some of the papers are exceedingly good, and will serve as valuable aids to the specialist, as well as to the general reader. The average merit of the papers is quite high.

The Student's Guide to Human Osteology. By W. W. Wagstaffe, B.A., F.R.C.S., Assistant Surgeon, etc., and Lecturer on Anatomy at St. Thomas's Hospital. Philadelphia: Lindsay & Blakiston. 1875.

This little volume of 349 pages of text-matter is the result of an effort, the author tells us, to give a brief, but clear description of the bones of the body, and at the same time to interest the reader by attaching points of practical importance to the various bony landmarks. In these respects the author appears to have fulfilled the object he had in view, and the descriptive portion of the work gives a fair résumé of what is found in most text-books. In the matter of bone-structure, however, we have a good deal that is new, being mostly the result of recent inquiries made by the author and others into the bony fibres, and their adaptability to sustain the peculiar tasks assigned them. Illustrations are numerous, both by lithographic plates and woodcuts. The former are mostly new, though the disadvantage of having them on separate pages is felt, as they are often far away from the text. Many of the woodcuts have been borrowed, chiefly from Ward. Those prepared for the author are often very poor, and are scarcely any addition to the value of the book. There is a certain carelessness of "get-up" about them that might have been avoided, though, as the author says, illustrations, whatever their beauty or correctness, can never supply the information to the student that the bone itself does, when held in the hand. The last eighteen pages give us a very useful summary that may be read with profit by student or practitioner. In it we have a description of the important bony points of the body such as can be felt with the finger, and their relation to various other important parts, that are to be borne in mind in matters of physical diagnosis, or when operative interference is required.

A Manual of Minor Surgery and Bandaging. By Christopher Heath, F.R.C.S., Surgeon to University College Hospital, etc. Philadelphia; Lindsay & Blakiston. 1875.

This little volume of some 300 pages, which has now entered on its fifth edition, is, as its author tells us, designed for the use of those who wish to master the smaller details of surgery, and so to prepare themselves for the numerous accidents and emergencies that are met with in hospital and dispensary practice. The author's experience as a dresser and house surgeon enable him to appreciate the value of just this kind of information, which is apt to be omitted in the larger text-books. Special rules are laid down for case-taking and for conducting post-mortem examinations. To these are also added a long list of formulæ in use in the London Hospitals, and some of the diet lists for patients. Altogether this little manual will be found very readable, and will carry useful information not only to students, but also to young practitioners who have not had the advantage of hospital training, and perhaps to others who are not specially familiar with the most recent advances made in this department. The illustrations are good, and are sufficiently numerous.

Outlines of Practical Histology; being the Notes of the Histological Section of the Class of Practical Physiology held in the University of Edinburgh. By William Rutherford, M.D., F.R.S.E., Professor of the Institutes of Medicine in the University of Edinburgh, Examiner in Physiology in the University of London. Philadelphia: Lindsay & Blakiston. 1875.

A handbook which acquaints us with the most recent methods of microscopic work is always to be prized, and especially if the matter be condensed in the least possible compass and is from the hands of an experienced teacher of microscopy. The bulky treatises on this subject have done a great deal to frighten away many who would have been glad to familiarize themselves with histological work. To such we would recommend these outlines, as showing in very simple words what is required in getting a knowledge of practical histology. The subject-matter is discussed in about seventy printed pages, while for convenience in taking notes, each page is interleaved. The author's familiarity with the subject enables him to give only those methods of work that long experience has shown to be the best. Though he has not contributed much that is new in the way of methods, he appears certainly to have done a great deal towards facilitating the work. The freezing microtome he describes gives promise of much success. It is exactly the instrument that has long been needed for preparing fresh tissues, especially nerve elements, and other delicate substances for early examination. Such an instrument, if cheap enough, will certainly come into very general use.

Uronology and its Practical Applications. By George M. Kober, M.D. Louisville, Ky., 1875. Reprinted from the *Richmond and Louisville Medical Journal*, September, October, November, and December, 1874.

This is an unpretentious pamphlet of about 100 pages, but contains, nevertheless, a good deal of valuable information drawn from reliable sources. The author discusses the characters of healthy urine, and describes its most important ingredients, and gives many good processes for their detection and quantitative deter-

mination. He describes the processes, however, a little too nakedly, and fails to give the necessary hints and "wrinkles" which the physician who is not already practically familiar with chemical manipulations should be acquainted with, to enable him to perform the necessary analyses successfully. For the determination of urea he recommends the old processes of Liebig and Davy, but fails to allude to the "corrections" which must be applied to the results obtained by either of these procedures. He makes no reference to the more recent and convenient, and probably more accurate, methods of Boymond, Piffard, and Yvon.

In but one place only we have observed a manifest error. Its importance, however, induces us to notice it. On page 29 we find: "The specific gravity is best taken by measuring 100 cc. of urine into a beaker or flask, whose weight is accurately known. The increase of weight in grains will be the specific gravity, water being 1000." If this were followed out, urine whose real specific gravity was 1.020, would appear to have a specific gravity of 1.308. The substitution of the word *grammes* for *grains* in the quotation will make the procedure correct. As the *metric* system is employed in the various analyses, we presume the "grains" is a misprint.

The author describes the microscopical appearances of urinary sediments, and illustrates them by means of reproductions of the lithographic plates of Vogel, Funke, etc. He discusses the pathological conditions associated with derangement of the urinary secretion, and gives many useful hints in connection with their management. Finally, he incorporates Thudichum's scheme for the systematic analysis of urine.

The importance of urinary examination is too often underrated, and the author deserves credit for calling the attention of the profession to the methods by which it may be successfully undertaken.

SANITARY AND MEDICAL REPORTS FOR 1873–74, by Officers of the United States Navy. Prepared for publication under the direction of the Surgeon-General of the Navy. By H. C. NELSON, M.D., Surgeon U. S. Navy.

UNDER the above title the Bureau of Medicine and Surgery has issued an octavo volume of eight hundred pages, comprising seventy-eight articles contributed by medical officers of the United States Navy. These reports embrace the subjects of hygiene in its application to ships-of-war and naval hospitals, medical topography of various foreign cities and countries, descriptions of foreign hospitals, accounts of certain rare drugs, and miscellaneous medical papers. The variety of subjects discussed in these pages is so great that our limited space precludes even the mere enumeration of them.

The appearance of such a creditable work, which excels its two predecessors both in interest and style, is an earnest of future production of still greater merit. The medical officers of the navy have for years labored under great discouragement. The bureau, since its establishment in 1842, has been plunged into Rip Van-Winkle slumber, disturbed only by its solicitude to discover the smallest quantity of beans and "junk" a sick man might be made to subsist upon, and their exact cost. Great importance was given to the expression of these two facts—quantity and cost; mathematically and sore were the trials of the medical officers in wrestling with decimal millionths and tens of millionths to arrive at the desired result, as an error of a millionth brought return of papers with the "returned for correction," and a lengthy correspondence. The real vital interests of medicine and surgery never dawned upon the bureau during its brief intervals of awakening. This state of affairs grew, in great measure, out of the lamentable mistake of political and religious interests determining the appointment of the least experienced and intelligent of the corps to the office of Surgeon-General, so that it was not surprising that blankets went to Africa, quiniæ and cotton goods to Labrador, and hospital supplies shipped after, instead of before, battle.

The same benighted policy withheld from medical officers all means of medical and scientific research that involved any expense. The instruments were, as a rule, bad, the medicines unreliable, and the surgical appliances of the meanest, cheapest, and most ancient sort. Thus all spirit of emulation was crushed out. The contributions of the bureau to medical science were restricted to the annual flatulent reports, barren of all utility except, perhaps, to puzzle children with decimal conundrums.

This state of things endured until the close of the war, when Dr. Wood, a gentleman of large experience and fine mental culture, succeeded to the bureau, and immediately inaugurated a new era, completely revolutionizing the arrangement of his predecessors. Supplies of the best materials, all the most improved appliances, were freely furnished, and medical officers were invited to make reports for publication, and, for the first time, prominence was given to purely medical interests. This policy has even been greatly amplified by Surgeon-General Beale, under whose fostering care the third volume of the bureau's series now appears. The superintendence of the work through the press has been entrusted to Surgeon H. C. Nelson, U. S. Navy, and the creditable manner in which he has acquitted himself will be revealed by the examination of the volume itself.

We are informed that the limited means of the bureau has restricted the edition to comparatively a small number, and far inadequate to the demand that will be made. This is much to be regretted, as its pages contain information that should be within reach of physicians throughout the country.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, January 12, 1876.

DR. F. DELAFIELD, PRESIDENT, IN THE CHAIR.

EMBOLIC SOFTENING OF THE BRAIN, WITH INFARCTIONS OF THE LUNG.

DR. SATTERTHWAITE presented the brain, right lung, and heart of a patient who had the following history:

He was first seen by the attending physician on November 17, 1875. Two days previously he had suffered from headache, referred to the occipital region, and the pain was so severe that he had to leave his business and return home. His wife gave him some laudanum, and he remained within doors, but continued to suffer. On the next day, the 16th, he took a cathartic. On the same evening, about 11 P.M., his wife was waked by finding him in a sort of convulsion; he then passed some fæces involuntarily, and was found to be unable to move or speak intelligently.

When seen the next day by his physician, he was found to have paralysis of motion and sensation in the left side, including the face. He was drowsy, but not comatose; he was made to understand who his physician was, but could not answer questions intelligently; he called for gin, and yet he was said to have been of temperate habits.

Pulse was slow and full. Within the next few days he regained his intelligence, so as to recognize every one, and to answer questions correctly, but not quickly, and he no longer made the irrelevant remarks which he had made at first. He was also able to move the left leg a very little when it was pinched, but this reaction did not subsequently increase. On November 24th there was crepitation and slight dulness, but no bronchial breathing or bronchophony in the lower part of the right lung before and behind. On November 25th, while being partly raised to take some milk, which was his chief diet, he suddenly complained of extreme pain in the lower part of the chest, to the right of the sternum. His face became congested and his whole body was bathed in profuse perspiration, and shortly his extremities, especially the right, non-paralyzed, became extremely cold. He was quite conscious, but complained of the pain, which, however, soon abated somewhat. The respiration was about 30 per minute, rather shallow, and accompanied by puffing out of the cheeks. The pulse was about 120 and very weak. Brandy was given him, and hot applications were made to the extremities. He rallied from the attack, and the pulse became stronger and less frequent, and he passed a good night.

On (3) November 28th, the night of December 10th, December 15th, and on December 20th, he had similar attacks, in the last of which he died suddenly. The pulse was quiet and weak during the attacks, but between them was remarkably slow, ranging from 48 to 68. During the last ten days of his life the pulse has been 90 and 100. The treatment consisted in giving brandy and laudanum. In one case morphine, administered hypodermically, had the happiest effect upon pulse, pain and respiration, and in a short space of time. He had very little other treatment—a little quinine, a little iodide of potassium, and a dose or two of castor-oil. The disease was held by his attending physicians to be one of multiple embolism—an opinion which Dr. Austin Flint, who was called in consultation, also gave.

Autopsy 24 hours post-mortem.

Body well nourished.

The *heart* was found to be a little enlarged. The valves were not very notably changed, though there were atheromatous deposits in both the aortic and mitral, the former being a little stiffened from atheromatous thickening. The aorta was also somewhat atheromatous. The left ventricle was considerably thickened.

The *right lung* was crepitant in front, but non-crepitant and adherent above and behind. There were some infarctions in the upper part of the lower lobe, varying in size from a small marble to a pigeon's egg. They varied in color from a yellowish-brown to a deep red.

The *left lung* was non-adherent, crepitant anteriorly, but congested hypostatically behind.

The *liver* and *spleen* presented nothing notably abnormal.

The *right kidney* was congested, somewhat lobulated, and cortex in parts adherent.

The *left kidney* was congested.

On exposing the *brain* the vessels of the meninges were distended with fluid blood, and there was considerable effusion of tolerably clear fluid in the meshes of the pia mater. The brain substance was soft and œdematous.

Upon the outer side of the right middle lobe a sense of fluctuation was given to the fingers as if there was a large collection of fluid in the middle lobe. When the brain was turned over on the left side, the wall of this softened middle lobe fell in for a distance of perhaps three inches in length and one to one and a half in breadth.

Examining the vessels at the base, they were, so far as could be seen, free from blood, but were markedly atheromatous at points. Following up the right fissure of Silvius, it was soon observed that the middle cerebral artery immediately beyond the origin of the ant. frontal, was tense from distention of the blood, and of a dull blue color; this distention extended onwards into the ant. and post. branches, one of which passes to the island of Reil, and the other to supply the middle lobe. From these points onwards they were empty, but the brain tissue about them was "mushy" in consistence, and of a faint reddish color. The softening also involved the floor of the corpus striatum of the same side, where the same condition of red softening could be seen. There were no marks of the ordinary vessels that are seen on the corpus striatum.

In this case the source of the emboli seemed to be the aortic valves, which were atheromatous, and minute masses might have been carried off from them and deposited in the brain and lungs. Microscopic examination of the plugs in the two branches of the middle cerebral showed that they contained granular matter and variously sized oil-globules, such as are seen in atheroma.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting. Feb. 4, 1876.

DR. E. G. LORING, PRESIDENT, IN THE CHAIR.

RECENT DISCOVERIES IN THE PHYSIOLOGY AND PATHOLOGY OF THE BRAIN.

DR. EUGENE DUPUY, in a plain and interesting manner, directed the attention of the Association to certain points relating to the function of different parts of the brain. His remarks were intended chiefly to overthrow the doctrine of localized functional centres, and were confined for the most part to the pathological lesions attending hemiplegia, hemi-anæsthesia, aphasia, and epilepsy. A review was made of cases from Charcot, Hitzig, Westfall's clinic, etc., and in these reports Dr. Dupuy believed he found just as much to disprove as to sustain the idea that there are in the brain localized centres for nerve force. Dr. Dupuy referred to the physiological experiments which have been performed upon animals with the view of locating such centres of nerve force; but he did not believe that they had substantiated the theory of localization. The doctor denies the excitability of the cortical substance of the brain. Aphasia may be developed by lesions independent of the island of Reil, or its immediate surroundings.

The natural fluid found in the cerebral substance and cavities constitutes one of the very best media for conducting electricity, hence must be removed as much as possible; absorbing with blotting paper is a good method, otherwise it will enter as a disturbing factor to the obtaining of exact results. When the experiments of Hitzig, Ferrier, and others have been re-

peated by Dr. Dupuy, after having taken such precaution as would enable him to apply the electrodes to a dry cortical substance, he has failed to verify the statements made by these experimenters. Dr. Dupuy's remarks were listened to with marked attention.

Dr. Dalton followed with remarks, in the course of which he referred to the fact that definite muscular contractions are produced in a living animal by the application of a very faint discharge of electricity to the cortical substance of the brain. Whether this is due to a physiological irritation conveyed downward, or is due to a simple diffusion of electricity to the deeper parts, is a question. The simplest explanation is, that the effect is produced by the conveying of a physiological irritation downwards. If it is due to a simple diffusion of electricity, why do we fail to get a certain set of contractions when the electrodes are applied elsewhere than over certain points? This fact was alluded to merely from its suggestive import, rather than because it carried with it any positive proof.

There are certain pathological lesions which are followed by certain clinical phenomena that are well established. For instance, when a patient has paralysis of motion upon one side it may be associated with lesions upon the same side or opposite side of the brain, but in by far the greater majority of cases upon the opposite. Now, when hemiplegia occurs from lesions upon the opposite side of the brain, it is due to a well-known anatomical reason; and when it occurs from a lesion upon the same side of the brain, there is doubtless an anatomical reason, the same as in the other instance, except that it has not yet been found. The subject is full of interest, and requires carefully conducted experiments to settle certain perplexing questions arising both in physiology and pathology.

Dr. Dupuy remarked with regard to the impression being conducted downward into or through the corpus striatum, that he had divided all the fibres going to that body, breaking it up entirely, and obtained the same muscular contractions as when the corpus striatum remained intact.

The hour of ten having arrived, the Association was adjourned.

Correspondence.

HÆMOPTYSIS: RELATION TO BAROMETRIC PRESSURE.

To the Editor of The Medical Record.

Sir:—The following case may be of interest to some of your readers:

May 25, I was called to see Mr. Q., aged 21 years, who had a violent attack of hæmoptysis, the first with which he had ever been visited. He is a gentleman of fine physical development, and has always enjoyed good health. His father died of consumption, but neither he nor his brother or sister—all of whom are grown—has manifested any symptoms of the disease before the attack in question. He has always taken more than the ordinary amount of physical exercise, using dumb-bells, Indian clubs, etc. These last he used during the summer of 1874, and he resumed their use in the spring of this year. He had not gone through his usual evolutions with them on the day of his attack, but had exercised with them somewhat violently the day previous. The day of the attack he felt as well as usual, was quietly engaged during the morning, and about the middle of the day lay down on his bed. Shortly after the hemorrhage came on suddenly, and was very profuse, occurring in the lower lobe of the left lung. Mr. Q. has had no hemorrhage since this attack.

The point of interest to which I wish to invite attention is this—*the coincidence of the hemorrhage with the time of minimum barometric pressure during a period of several days preceding and following the attack, this coincidence extending not only to the day of the month, but also to the time of day.*

Knowing that the month of May had been one of exceptionally low atmospheric pressure, I concluded to investigate the subject more accurately. I therefore, some days afterward, obtained from Prof. F., who keeps the meteorological record at this station for the War Department, the readings of the barometer for several days before and after the 25th of May, and here append them. These observations were taken thrice daily at 7 A.M., 2 P.M., and 9 P.M. I also give the average of each day's readings:

May 18	29.269, 29.165, 29.105	= Average	29.180	May 24	28.850, 28.767, 28.812	= Average	28.810
" 19	29.118, 29.047, 29.010	= "	29.058	" 25	28.824, 28.759, 28.777	= "	28.787
" 20	29.089, 29.047, 29.160	= "	29.099	" 26	23.992, 28.875, 28.897	= "	28.921
" 21	29.032, 28.957, 28.947	= "	28.979	" 27	28.962, 29.166, 28.852	= "	28.973
" 22	28.911, 28.928, 28.935	= "	28.925	" 28	29.011, 29.001, 28.962	= "	28.991
" 23	28.909, 28.824, 28.860	= "	28.864	" 29	29.076, 29.051, 29.073	= "	29.067

I could have gone back of May 18, and shown that the mercury had descended almost from the beginning of the month, and it continued to rise even after the 29th.

This may be simply a fortuitous coincidence, but I can hardly resist the belief in a causative relation of greater or less degree between the two events. I am inclined to think that the increased arterial tension caused by diminished barometric pressure, superadded to the strain of the previous day's exercise, precipitated the catastrophe, which might otherwise have been escaped. We are all familiar with accounts of such hemorrhages occurring in ascending mountains, although some observers are disposed to attribute them to the unaccustomed exertion rather than to rarefied atmosphere. This explanation, however, would not suffice in the case of aeronauts.

I report the case that the question may be tested by other observers.

Alfred B. Nelson, M.D.

Danville, Ky., *Feb.* 6, 1875.

Children's Hospital of the District of Columbia.—The fifth annual report of this institution states that the aggregate number of patients treated during the past year was over 1,700, an increase of 700 over the previous year. The charity is in a prosperous condition generally, and is constantly increasing its usefulness. The medical staff consists as follows: Consulting Medical Board—Drs. J. C. Hall, Grafton Tyler, C. H. Leebermann, W. P. Johnston, and Johnson Eliot: Attending Physicians—Drs. F. A. Ashford, S. C. Busey, W. B. Drinkard and W. W. Johnston: House Physician—W. W. Streeter, M.D.

SIAMESE OBSTETRICS.

To the Editor of The Medical Record.

Dear Sir:—Thinking a short article on Siamese Obstetrics might be interesting to your readers, I forward you the following description of practice in this country, from my own observation. When a woman is about being confined, several female friends are called in as attendants, also the old "yi" or midwife. Another name they have for her is moh-rasksah-cran.

The only means they have for aiding the woman in labor are manipulations and pressure. They place the patient on her back, then a woman is seated on each side, these two women begin by forcibly pressing the abdomen down and backward.

This procedure is continued from three to five hours; then, if having failed to expel the fœtus, one of the attendants is supported by the hand while she tramps the abdomen of the patient; always placing her feet above the fœtus. Then, as a *dernier ressort*, all other means having failed, they suspend the *parturient* by means of a band beneath the arms. One, and sometime two, of the attendants, will then clasp with their arms the body of the patient and suspend themselves also. This last expedient seldom fails to produce a rupture in some direction,—it may be the uterus, perinæum or encephalon of the child. I am certain many children die from harsh treatment during parturition.

I have seen even adults with cysts of large size attached to a point corresponding with the anterior fontanel of infancy, and heads of the still-born dreadfully lacerated. W. L. Hutchinson, M.D.

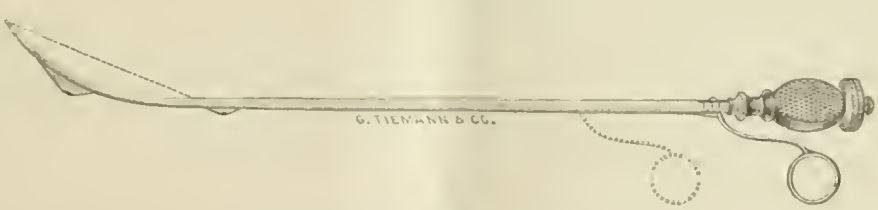
Bangkok, Siam, *November* 11, 1875.

New Instruments.

A DILATING URETHROTOME.

By JAS. ANDREW MILNE, M.D.

In offering a new stricture instrument to the profession, it is not that I would ignore the many valuable ones already brought to notice and repute; but believing the one here represented to meet many requirements not fulfilled by others, I cannot but feel certain it will be appreciated by those that employ it.



The instrument consists of a dilator that is brought into action by a screw force at the handle, producing traction upon a flexible rod attached to the terminal extremity of the instrument, and is lifted from a curve to bridge over the concavity, making it a dilator of capacity and power.

Near the handle, upon the side, is a graduated scale, showing at a glance the exact degree to which the dilator has been opened.

Upon the convex side of the instrument slides a guarded knife for dividing the stricture tissue.

The point is so constructed that a small whalebone bougie can be attached, to serve as a guide in cases of very small calibre; thus a stricture of slight capacity can be permeated.

The size of the instrument when closed is No. 8 French; therefore it is much smaller than any other instrument I am acquainted with—even Dr. P. H. Watson's modification of Mr. Holt's dilator, which is 10 French. This great reduction in size does away with much of the trouble of dilating a stricture with bougies so as to admit of the use of any of the instruments heretofore in use.

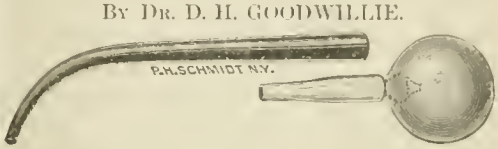
I have used the instrument in a sufficient number of cases to test its working fully, and am certain it will find favor with those that employ it.

Internal urethrotomy is the most reliable, by far the safest, more readily accomplished, and the most effectual means of cure for stricture of the urethra yet devised. A careful and thorough division of the tissue forming the stricture, followed by the use of a sound of *large size*, until the work of healing has been perfectly accomplished, can but result in the most satisfactory manner.

Oswego, N. Y., *Jan.* 10, 1876.

IMPROVED LARYNGEAL INSUFFLATOR.

By Dr. D. H. GOODWILLIE.



The above cut represents a laryngeal and post-nasal insufflator. It consists of a stem of hard rubber, and a glass powder-holder attached to a ball of soft rubber. The powder-holder fits into the stem. The advantages are, that it is easily loaded by putting the glass-holder into the powder in the bottle. The powder fills up the whole calibre of the tube, and so is sure to be blown out. The glass-holder can be readily disjointed from the ball, and, by tubing, be attached to the air-receiver if desired. Use a bottle for your powder two inches deep, with a wide mouth. Keep the ball and holder in the bottle when not in use, instead of a cork, and it will be always ready loaded for use when wanted.

160 West 34th Street.

CHANGES IN THE PUBLIC SERVICE.

ARMY.

Hubbard, Van Buren, Assistant Surgeon.—Granted leave of absence for two months. S. O. 26, A. G. O., Feb. 7th, 1876.

The Concours for Forty-seven Appointments of House Surgeon to the Paris Hospitals has just ended, and the examination is said to have been very creditable to the proficiency of the candidates.

Medical Items and News.

Death of Dr. E. Lee Jones.—We are pained to hear of the sudden death, on Jan. 30, 1876, at Oakland, Cal., of our esteemed friend Dr. E. Lee Jones, for a long time an honored and influential practitioner of this city, and an active worker in many of our societies. Two or three years since, in consequence of failing health, he took up his residence in Oakland, where he was honored by his medical brethren in many ways, not the least of which was his election as President of the Alameda County Medical Association. The following action was taken by that body regarding his death:—

Oakland, Cal., *January* 31, 1876.

At a special meeting of the "Alameda County Medical Association," held at its rooms this evening, a Committee was appointed to draft resolutions regarding the death of the late Dr. E. Lee Jones, consisting of Drs. Wm. P. Gibbons, Jno. C. Van Wyck, and Chas. S. Kittredge, who presented the following:

Whereas, The presence of death, at all times sorrowful, has been especially so in a recent visitation, which has removed Dr. E. Lee Jones, President of this Society, from an honorable and useful career among men; therefore,

Resolved, That in the life and daily walks of the deceased we recognize a character which combined purity of life, integrity of principle and high intellectual culture with a professional life, and made up the substance of a true physician.

Resolved, That we desire so to emulate his standard virtues, that while we honor our profession before men, we may ultimately receive the benefaction now realized by our deceased brother, and which is promised to good and faithful stewards.

Resolved, That our sympathies follow his bereaved family through the cloud of sorrow which now rests about their habitation.

C. S. Kittredge, M.D., *Secretary*.

Snow in the Streets.—When snow falls in the streets of Lyons (France), it is immediately washed away by hose attached to the water mains. Not only is the snow thus disposed of, but the streets are washed clean.

The Medico-Legal Society is founding a library. A large number of very valuable works have been secured, among them a complete set of the *Annales d'Hygiène Publique et de Medecine Légale*, numbering ninety-two volumes. The late President, Mr. Clark Bell, has been untiring in his exertions to give the library a good start, and to his special labors and contributions is in most part due its promising future.

Medical Testimonials.—The practice of giving medical testimonials in favor of articles of commerce is on the increase in London. "A very common device," says *The Lancet*, "is to send the medical man some of the article it is designed to puff. He incautiously acknowledges receipt, with a few graceful remarks, the product of ordinary civility, and straightway his name appears in print." We have the same trouble here, but in a more aggravated form.

Dr. Tilt, of London, has been elected honorary fellow of the Obstetrical Society of Philadelphia.

Scrofulide.—"The Treatment of the Different Forms of Scrofulide" is the title of a pamphlet by Dr. H. G. Piffard of this city, which is republished from the *London Practitioner*.

The Children's Hospital of Boston treated during the past year one hundred and forty-five patients, of whom sixty-nine were cured, twenty-three relieved, and sixteen died. In connection with the institution, a convalescent home has been established fourteen miles from Boston, a short distance from the station in Wellesley. From the first of June to the middle of October thirty-nine children were treated there. The experiment is said to be a success.

Decay of Trees in Kensington Gardens.—There is considerable anxiety manifested in regard to the probable decay of many of the finest trees in these famous gardens. Many causes have been assigned, the most reasonable of which are, the absence of the natural mould at the foot of the trees, too perfect drainage of the soil, and the deteriorated air of London.

The New Medical Staff Bill introduced by Senator Logan is making good progress, and there is a reasonable hope of its becoming a law.

Trenton Lunatic Asylum.—A legislative committee has been appointed to inquire into alleged extravagance in the management of this institution.

United States Medical Directory.—A second revised edition of this work is to be prepared.

New York Veterinary Society.—The following officers have been elected for the ensuing year: A. Lockhart, M.R.C.V.S.L., President; J. L. Robertson, M.D., V.S., Vice-President; J. D. Hopkins, V.S., Treasurer; and L. T. Bell, V.S., Secretary.

Bronchocele in Horses.—Prof. Liautard, of the American Veterinary College of this city, recently successfully extirpated two large bronchocele from horses, aged respectively nine and fifteen years. With one exception, no similar cases have been reported for the past thirty-three years.

Vivisection.—The discussion of this subject, which has been carried on so extensively in England, has been referred by the Government to a Royal Commission, from which a report is soon expected.

An Asylum for Lepers at Bombay, with a capacity for 150 patients, is to be built as a memorial of the visit of the Prince of Wales.

The New York Dermatological Society has recently adopted the rule, that candidates for admission shall apply in writing to the President, and accompany their application with an appropriate thesis. This is an evidence of progress.

The Plague is said to have reappeared in Mesopotamia.

Death from Chloral.—Another death from an overdose of Chloral is reported in the *Medical Press and Circular* (January 19). The patient was a lady, who took of a patented preparation a quantity which was ascertained to contain one hundred and twenty-five grains of the drug.

Weekly Bulletin of Medical Societies.

Monday, Feb. 21.—Obstetric Section, Academy of Medicine. New York Society of Neurology and Electrology.

Tuesday, Feb. 22.—Yorkville Medical Association. Council of Academy of Medicine.

Wednesday, Feb. 23.—New York Pathological Society.

Thursday, Feb. 24.—New York Medico-Legal Society.

Friday, Feb. 25.—Medical Journal Association.

Saturday, Feb. 26.—New York Medical and Surgical Society.

Original Communications.

A VARIETY OF "INFANTILE HERNIA," STRANGULATED, WITH OPERATION.

By JAS. D. TRASK, M.D.,

ASTORIA, N. Y.

FRIDAY, Jan. 7th, of the present year, I was called in haste at 9 P.M. to a gentleman, a stranger to me, in relation to whom I learned the following history:

Mr. E. P., æt. 57 years, on rising Wednesday morning, Jan. 5th, went to the well to draw water. In the act of lifting the pail, he was conscious of an unusual sensation in the left groin. At least twelve years ago Mr. P. was the subject of hernia in the same spot, and wore a truss; but for the last six years he had not worn the instrument, neither, as he believed, had the gut come down during that time. On the recurrence of the hernia he went to bed, suffering from discomfort in his bowels, not at first recognizing the hernia, and took an ounce of castor-oil. The oil was almost immediately vomited, and the dose was repeated. The second dose having been rejected, he took repeated draughts of saline cathartics, all of which were thrown from the stomach, and no action of the bowels took place. He had also taken a warm bath. Suffering from pain in the bowels, the stomach rejecting all nourishment as well as medicines, he passed the whole of Wednesday, Thursday, and Friday in great distress, but obstinately refusing medical aid.

In the evening of Friday he allowed a physician to be sent for, who administered a large dose of morphine hypodermically, and retired from attendance.

When seen by me two hours afterward, the patient was in a state of collapse. The pupils were contracted from the morphine, but he still complained of pain at the seat of the hernia. The intellect was perfectly clear; he gave a history of his case, and stated that the matters vomited during the day had been observed by himself to have a distinctly fecal odor.

At first glance it seemed to me that he was beyond reach of aid. On inquiry, however, I found that he had as yet taken no stimulus. On giving him brandy, and applying heat to the extremities, a portion of the brandy was retained, and some reaction ensued.

On examining the tumor it was found to be about one and a half inches in its long diameter, and one inch in its transverse, and it occupied the ordinary site of femoral hernia. Considerable doubt was felt as to the character of the hernia, whether inguinal or femoral. After quite a protracted examination by myself and a medical friend who, with my son, was assisting me, there seemed to be little reason for regarding it as anything else than femoral, and yet this could not be determined with confidence. It lay almost altogether below Poupart's ligament, and the finger could readily be passed in the direction of the femoral vessels. The pubes having been shaved, a short neck could be felt upon deep pressure, extending to the site of the internal abdominal ring. Gentle taxis was unsuccessful in reducing the tumor.

In consequence of the extreme prostration of the patient he was not etherized. An incision was made through the integuments, from over the internal ring downward and slightly inward, in the direction of the femoral ring, and in the long axis of the tumor. Beneath the integuments the dissection was made by the knife through a layer of condensed connective and fibrous tissue, which could not be taken up by the director. Beneath this the director was employed, and by its aid two pretty distinct planes of muscular fibres were divided, as well as some loose areolar tissue beneath these, exposing what was regarded as the hernial sac. This structure was raised by the forceps, and when snipped, divided upon the director. The interior of a serous sac was thus exposed, and what was assumed to be the knuckle of intestine came into view. The finger could be passed in freely upon the pubic side, and swept downward, encountering several small thread-like bands, most of which were broken by the finger, and some cut by the knife. The tumor could be turned out of its investing sac, and seemed quite movable, but the bands high up on the under side, and also on iliac side, were found too numerous and dense to be broken up. Carrying the finger up toward the internal ring, the neck of the tumor was found adherent to it on all sides. It was impossible to pass the director or probe at any point. At this time we knew only of the recent strangulation, but had no positive knowledge as to the past condition of the hernia; and it was by no means improbable that a portion of the gut had been down for years, and contracted adhesions. The knuckle had the glistening aspect of intestine, and after awhile lost its lustre from exposure to the air. On pinching up a portion of the wall, for it was not tense, this could be distinctly detached from a mass within, which had the feel of omentum. If the knuckle were intestine, the contents were inexplicable.

An attempt was made to dissect up the supposed adhesions by the sharp finger-nail. By this means the internal ring seemed to have been opened up in front, and enlarged to receive the tip of the finger. Taxis was tried, but failed to reduce the swelling. It was now discovered that the finger had dissected up a plane of fibrous tissue. After introducing the director beneath fasciculi of the supposed adhesions of the neck, these were divided. This was repeated again and again, until the director at last penetrated a cavity, and being turned downward and forward, could be passed onward so as to be felt beneath the investing wall above referred to; and this being laid open by the knife, the intestine itself came into view.

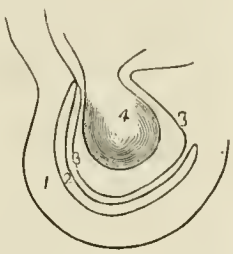
Notwithstanding the duration of the strangulation and the gravity of the symptoms, the intestine appeared to be in a condition to justify its return. It was flaccid and entirely empty. On carrying the finger up to the internal ring, by a little exertion this was enlarged so as to allow of the reduction of the intestine. The lacerations that had been effected outside the neck of the sac proper, rendered the opening into the peritoneal cavity so large that the intestine could not be kept reduced. In consequence of this I introduced two silver sutures through all the investing structures and the peritoneum, and closed the wound. Not a drop of fluid was found in either sac.

The operation, necessarily somewhat protracted, was borne with scarce a complaint, and the patient expressed himself much relieved after return of the bowel. There was no more hiccup; and food and stimulants were retained. He sank, twelve hours after the operation, from the exhaustion of prolonged and unmitigated suffering and want of support.

What were the nature and origin of the false sac first encountered? It was clearly peritoneal, and the hernia a form of the variety improperly called "infantile." As described by Gray (see *Anatomy*, Amer. edit., 1870, p. 829), in infantile hernia "the hernial sac descends along the inguinal canal *into the scrotum*, behind the pouch of peritoneum which accompanies

the cord and testis. The abdominal aperture of this pouch is closed, but the portion contained in the inguinal canal remains unobliterated." The hernial sac is invested more or less completely by the posterior layer of the tunica vaginalis, with some areolar tissue between, "so that in operating upon this variety of hernia, three layers of peritoneum would require division."

The only explanation that can be offered of the conditions found in the case now reported, seems to be, that adhesions of the opposite surfaces of the tunica vaginalis had occurred not only at the abdominal ring, but from the testis upward, quite into the inguinal canal, but not throughout its entire length, leaving a space in the upper portion of the canal still open. The knuckle, originally passing through the internal ring, descended a very little distance behind this closed sac or pouch of peritoneum, sufficiently far to engage it so as to carry the pouch before it as it itself advanced in its course forward. The mechanism of this will be easily understood from the accompanying diagram.



Had it been a case in which the tunica vaginalis was yet open at the abdominal ring, but closed from below upward, it would have been simply a modification of ordinary congenital hernia, and there would have been but one peritoneal covering. The adhesions that were broken up by the finger nail during the operation were those by which the abdominal opening of the tunica vaginalis had been originally obliterated. By the destruction of these adhesions outside the true sac, the finger had gained access to the peritoneal cavity.

The hernia apparently occupied but a small portion of the inguinal canal. It certainly did not follow the course of the canal; but emerging from the internal ring it passed first directly forward, and then downward, over and below Poupart's ligament, so as to lie directly upon the saphenous opening. Hence the difficulty in diagnosis. The ordinary coverings of such a hernia would be integuments, superficial fascia, tendon of external oblique and internal oblique muscle, which latter furnished muscular fibres that were encountered in the operation. Beneath these would come the two layers of tunica vaginalis, and under these the hernial sac itself. In the present instance the protrusion unquestionably occurred through a fissure in the aponeurosis of the external oblique, as no layer corresponding to this was encountered in the operation. Occupying this position, the possibility of its connection with the tunica vaginalis could hardly suggest itself.

All authors concur in the rarity of what is called infantile hernia. Mr. Birkett, in Holmes's System of Surgery, describes four different conditions in which the infundibuliform process of the tunica vaginalis may be found after descent of the testis, but neither of these corresponds to that here described.

After examination of the principal surgical authorities, I can find no account of the occurrence of hernia under the peculiar conditions met with in the case here reported, and I am therefore inclined to believe that it is a form heretofore undescribed.

A NEW UTERINE APPLICATOR.

By JOSEPH R. BECK, M.D.,

FORT WAYNE, INDIANA.

(Read before the Allen Co. (Ind.) Medical Society, Jan. 4, 1876.)

THERE can no longer be any doubt entertained by any practitioner who has carefully noted the progress of events, of the fact that the injection of a medicated fluid into the cavity of the uterus is hazardous. Perhaps it would be as well, while we are engaged in classifying the operation, to follow in the wake of the insurance men, and denominate it an "extra-hazardous" operation.

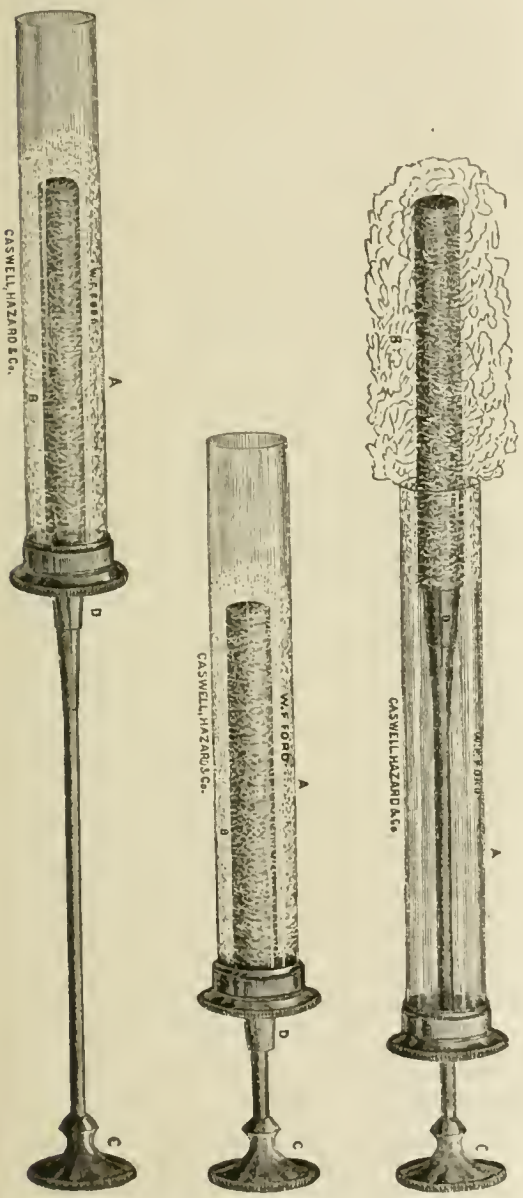
The echoes of the fierce discussion which was had on the propriety of this procedure, having a special bearing on the employment of the perchloride of iron in post-partum hemorrhages, have scarcely ceased to reverberate through the hall of the British Obstetrical Society, where the operation was bitterly assailed, and as carefully defended, ere the busy practitioner, who had accepted the legitimacy of the operation, because of the undoubted authority which stood as its sponsor, began to record his experience in its employment. It is a peculiar fact, and one worthy of a passing notice at least, that although Dr. Barnes advocated the operation because of its great success in his hands, yet probably not more than a dozen other practitioners, who followed him in its use, are able to add very powerful testimony to its unvarying good results. On the other hand, scarcely a week passes in which death, as the result of this operation, is not recorded somewhere.

I do not propose to insinuate here that the *application* of fluid medicaments to the intra-uterine mucous membrane is improper or illegitimate. On the contrary, the measure counts among its advocates none warmer in its praise than myself, particularly in the application of the perchloride of iron to a post-partum hemorrhage. But——! This exclamation implies an objection, and the objection exists in the fact that while I am an enthusiastic advocate of the *application* of such medicaments, yet I am no less earnestly opposed to their application *by injection*. Take, for example, the history of post-partum hemorrhages, where the principal object has been to restrain the flow. The mechanical part of the operation has almost uniformly been a success; but the case has thereafter so very frequently resulted in a "smart peritonitis," or—death, that we may well begin to suspect that there is something in the matter which is radically wrong.

It cannot be that the wrong lies in the medicine, and hence I apprehend that the whole burden of the trouble may justly be cast upon the manner in which the remedy *has been applied*. Of course, as I am an advocate of the employment of intra-uterine medication in hemorrhages and otherwise, no discussion of its merits need be touched upon in this paper, and the point to be insisted upon, succinctly stated, is only as follows:

The application of a solution of the perchloride of iron will always check a uterine hemorrhage, except in occasional cases of very large fibroids, or cancerous elaborations; but the *injection* of the medicine will occasionally and semi-occasionally produce death in

addition to a checking of the hemorrhage. This is an unfortunate state of affairs, and the more so in that the number of fatal terminations is understated rather than exaggerated. If it were deemed necessary, a number of my colleagues in my own State could testify to the correctness of this observation. Some of these gentlemen were expert gynæcologists, too, as I happen to know, and were fully provided with the most improved apparatus for injection, and yet they are compelled to report that death frequently lurks in the operation.



[Instrument closed. *A*, Barrel; *B*, brush-plunger; *C*, concealed piston; *D*, point where *C* fastens into *B* when ready for use.

C withdrawn from plunger and caught at *D*. Ready for use.

C returned into *A*, extrudes the brush-plunger *B* into the uterine cavity. It has been previously charged with the medicament, and by turning *C* in the barrel *A*, the plunger is made to revolve, and thus touch the whole intra-uterine surface.]

This brings me to what I desire to present as my own views in the matter, and to explain what I have devised and substituted in the way of *application* for *injection*.

In the summer of 1871 I was called to see a married woman, living about five miles south of the city, who had been an invalid for about two and a half years. She had never fully recovered from her last labor, which had occurred about that length of time prior to my visit, and the trouble had originated in all probability from a remnant of placenta having been allowed to remain in the uterus after delivery. It is needless to go into the details of the treatment I gave her, and it is sufficient to remark that after dilating the cervical canal, and scraping off the adventitious growth, the patient had a terrific hemorrhage. This I eventually succeeded in checking by means of the injection of the perchloride of iron solution, carried in through an excellent double catheter. The patient had pelvi-peritonitis rapidly developed, and in spite of all efforts died inside of two weeks.

I had employed various other plans of treatment unsuccessfully, before resorting to the iron injection, and my mind is fully made up that the *injection*, not the medicine, was the exciting cause of the peritonitis, and hence of the death. I can contribute much testimony as to the value of the remedy, and feel satisfied that its field of usefulness should be more widely extended; but my voice has been from the time of this death totally against the *injection* of *any* medicament into the cavity of the uterus, *under any circumstances*, on account of the great danger incurred thereby. My opposition to the measure is still more decided since I know that the same good effects attending the *injection* may be attained by other means, which, in addition to being equally effective, have the qualification of being absolutely and entirely devoid of any danger.

I had about the time referred to, numerous cases of hemorrhage following abortions and miscarriages, and occasionally a few after labor at term, and the question forced itself upon me as to how the iron solution could be *safely* applied to the uterine mucous membrane, when other well-known remedies had failed to arrest the hemorrhage. It had also been a matter of frequent note with me, that the various instruments designed for the application of remedies to that membrane in other diseases were, in many instances, lamentable failures (notably the application of iodine for chronic endometritis); and quite a long time ago, as early as the winter of 1871, in fact, I thought of devising some means whereby the necessary applications could be made to this membrane, *with absolutely no danger*, and with the production of less uterine colic than was the case generally. Revolving the matter in my mind, I finally designed an instrument for this purpose, which I denominate my "Uterine Applicator," and to which I desire to call the attention of the profession. In my humble judgment it is, for its purposes, as nearly perfection as it is possible to have any instrument.

The description of the Applicator will occupy us but for a moment, owing to the fact that there is so very little to describe. It consists of three parts, a barrel, a brush plunger, and a concealed piston. It is so simple that its every qualification can be easily seen in the subjoined figures. The barrel is made of glass,

and is three-quarters of an inch in diameter, and six inches long. The plunger and piston are of brass, nickel-plated, the former being four and a half, and the latter six inches long, thus giving an extreme length of ten and a half inches, which I have found to be long enough to meet every indication. The plunger is covered with a brush made of a piece of sheepskin, with the wool on, which is put on the plunger while the tanned skin is wet, and thus hugs the plunger tightly when it dries. The figures explain the instrument in other particulars.

It will be seen from the description of the instrument that its range of usefulness can be almost indefinitely extended, and that every case which requires an application of any medicine to the cavity of the uterus, can be fully and completely covered by my Applicator, so long as the medicament used is either in a liquid or a pulverulent form. It is, of course, entirely unnecessary to detail the pathological conditions in which the instrument affords an invaluable aid, and it is sufficient to say that in a series of the most severe and exhaustive trials, covering a period of four years, I have never had one occasion to be dissatisfied with it.

It is manufactured solely by Mr. W. F. Ford, of New York, and is also for sale by Messrs. Caswell, Hazard & Co., of that city. The great simplicity of the instrument implies a corresponding cheapness in cost, and the result is that every practitioner can add one to his obstetrical case, with no inconvenience to himself. The brush, if carefully cleaned after using, will remain in good condition for a long time, and the remaining portions of the Applicator will never wear out.

With the remark that the instrument is only intended to be used through a dilated os and cervix (which reminder is, however, not needed), when applied to the uterine cavity, I invite the profession to a consideration of its many manifest merits.

15 East Washington Street.

A CASE OF PUDENDAL HEMORRHAGE.

By HENRY N. READ, M.D.,

ADJUNCT PHYSICIAN TO THE LONG ISLAND COLLEGE HOSPITAL.

Mrs. S——, a delicate, nervous woman, engaged me to attend her in her fifth confinement, which, as she menstruated last in the second week in December, 1874, I entered on my record as due the middle of September. I was called in several times during the month of July to prescribe for her, and found her always suffering from weakness, fainting spells, and pain in the lower limbs and feet; the veins in the legs were greatly enlarged, and considerable œdema also existed; no albumen in urine. Enjoining rest in a horizontal posture and the avoidance of all exertion, I had not seen her for a week when I was sent for, the evening of the 10th August, in great haste, with the intelligence that she was in labor and flooding. When I arrived at her house I found her in bed, perfectly exsanguinated, with an anxious countenance, complaining of a burning pain in the vulva, but no labor pains. The nurse told me that "it did not act like a labor case;" that the patient had lifted one of her children from the floor, and had immediately sunk down saying, "that something had given way." When she was carried to bed a pool of blood was found on the floor, which continued to run very fast as she was carried along. I passed my hand under the clothes and found a tumor between the thighs, and on inspection found the bed saturated with blood of a dark venous kind, which was issuing with a perfect gush, from an opening in the inner side, through the mucous membrane of the left labium majus. The left labium itself was enormously enlarged, fully equal in size to the head of a new-born child, of a color almost black, and exquisitely painful to the touch. The opening through the mucous membrane readily admitted two fingers and thumb, and was situated within the vulva, which made it more difficult to reach; great tension of the parts also existed, with great pain to the patient on touching. The right labium was, with all the external genitalia, completely hidden, and the tumor, as the patient lay with limbs extended, looked like a large blue-black bag, occupying the whole of the space between the thighs. I immediately passed my fingers into the opening and turned out a quantity of clots, but this was followed by a gush of blood, which quickly filled up the cavity occupied by the clots, and ran in a stream from the opening. I then hastily stuffed into the opening rags dipped in ice-water, pushing in as many as possible, and, keeping my fingers pressed on them, sent for persulph. of iron, in the meantime stimulating with whiskey and ammonia. When the persulph. arrived I saturated a number of pledgets of raw cotton with it, and then removing the rags and clots rapidly filled up the space with the pledgets. This checked the hemorrhage somewhat, but it soon began again, and I again emptied the cavity of the pledgets, and taking the bottle thrust the neck into the opening and poured about ℥ ss of the solution into the cavity; fresh cotton was then packed in, and this controlled the bleeding effectually. The patient complaining of intolerable burning pain, I gave half a grain of morphine, and having bandaged the legs from the feet up I made her comfortable. No hemorrhage returning, after waiting some time I left at 10½ P.M. Returned at 2 A.M., found no bleeding; patient complaining and restless. At 10 A.M. next day no hemorrhage, patient very restless, suffering great pain; temp. 102½°, pulse 130. The tumor appeared hot, hard, and very tender, with no diminution in size. I drew the water with difficulty, owing to the swelling, and this gave much relief. Fearing lest inflammation and septicæmia should set in, I made an attempt to remove the material in the tumor, but the first attempt caused bleeding, and it was abandoned. Gr. ⅛ morph. was ordered every two hours, and iced cloths applied to the tumor. Saw her at 5 P.M. same day; temp. 103½°, pulse 140; no reduction in size of tumor, but less heat and tenderness; patient more quiet and somewhat under influence of morph. Ord. gr. iij. quin. sulph. every three hours, iced cloths continued; morph. stopped. Saw her at 10 A.M. next day; temp. 102°, pulse 124. No change in condition of tumor. Complaining of severe intermittent pains in back, resembling labor pains. Alarmed lest labor should set in with such an obstacle in the way of delivery, I again attempted to remove the packing, but the hemorrhage again appearing I had to desist. The quinia was stopped, and gr. ¼ morph. administered, and I had the satisfaction of finding the pains in the back cease; continued iced cloths, and administered nutritious food and whiskey. No change at 6 P.M. same day. At 10 A.M. next day, third after the accident, I found a decided improvement; temp. 100½°, pulse 110. Tumor somewhat shrunken, with slight oozing, and very offensive smell. Beginning carefully I removed piece by piece the contents of the tumor. A large cavity was left, which was injected with a solution of carbolic acid, and injections ordered every two hours, as there was a large and offensive discharge.

The patient progressed favorably from this time, and at the present writing is walking about the house. The labium is shrunken to its normal size, and no deformity of parts exists; the varicose veins and œdema of lower legs have also disappeared. The case presents some interesting points. The occurrence of this accident is much more common during parturition, or just after it, than previous to it. Simple thrombus of the vulva, with no external opening, is neither during pregnancy nor parturition a dangerous affair; but with a large opening, or with any opening externally communicating with the engorged plexus of veins of the bulbi vestibuli, it cannot but be regarded as very serious. The only other case that has come under my observation—one in the practice of a friend—terminated fatally before medical aid could be obtained, hemorrhage being the cause of death. Authors differ as to the prognosis of the accident. Velpeau regards it as rather belonging to the non-pregnant than to the pregnant woman, and states that it is *not dangerous*, owing to the fact that there are no large vessels in the vicinity to be injured. This evidently refers to thrombus in the unimpregnated woman, for enlargement of all the vessels in the parts adjacent to the organs of generation takes place to such an extent in the latter months of pregnancy that we get the vaginal pulse distinctly by a finger in the vagina, and any rupture of a vessel in these highly engorged parts, where the veins and plexuses communicate so freely, must be regarded as serious. Cazeaux gives the prognosis as unfavorable, citing the statistics of Deneaux, who collected sixty cases, occurring before, during, and after parturition, in which there were twenty-two deaths—36.6 per cent. Perret and Blot also state the prognosis very grave. Prof. Barker gives the prognosis as much more favorable than the French authors cited, and thinks that improved methods of diagnosis and treatment account for it; in his admirable work on "Puerperal Diseases" he cites thirteen cases which had occurred at Bellevue Hospital during his connection with the institution, in which there were only two deaths. Scanzoni has collated fifteen cases, with no death. A case of Wood's, and one of Sayre's, with recovery in each, is mentioned by Barker. The very different views of men equally eminent may, I think, be explained on a different ground from that advanced by Barker, viz., "improved methods of diagnosis and treatment." The diagnosis of these tumors is readily made, a simple inspection being sufficient; and as far as regards the treatment, all authors to whom I have referred give the treatment as the same—Barker himself, Cazeaux, Thomas, Scanzoni, Deneaux, Velpeau, Bedford, Tyler Smith, and others. My theory is, that the prognosis depends very much on the anatomical point of rupture of the blood-vessel. If this take place superficially, *i.e.*, between the skin and superficial aponeurosis, or between the superficial and middle aponeuroses, the prognosis is favorable; but if it occur between the perineal and pelvic aponeuroses, or above this latter, the prognosis is obviously very grave; for in either of these cases, the blood following the reflections of the aponeuroses, could invade the entire pelvis, extending even to the iliac fossæ and peritoneum, and if the hemorrhage could be controlled, fatal peritonitis would be most likely to occur. In my case the rupture occurred between the superficial and middle fasciæ, and the blood was necessarily confined to the cellular tissue of the labium, so when the external opening was closed hydrostatic pressure caused the bleeding to cease.

I was sent for to attend Mrs S——, on the evening of the 23d of Sept., and after a five hours' labor she was delived of a female child weighing about seven pounds. The breech presented, but nothing unusual occurred during labor, the child being born alive, though feeble, and for a few days it was doubtful whether it would live; it soon began, however, to thrive, and both mother and child now enjoy excellent health.

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Progress of Medical Science.

Abdominal Section for Intussusception.—At a recent meeting of the Royal Medical and Chirurgical Society, three papers were read upon this operation. Mr. Howard Marsh related a successful operation, performed by himself on an infant seven months old, that had been complaining for thirteen days. The bowel was found projecting two inches beyond the anus, and the ileo-cæcal valve could be seen at the extremity of the protrusion, while in the abdomen a firm cylindrical tumor was felt. Insufflation, and the careful distention of the large intestine with lukewarm water, failed to reduce the intussusception. Abdominal section was then decided upon. Chloroform having been administered, the abdomen was opened to the extent of two inches in the median line, just below the umbilicus. It was impossible to reduce the intussusception by the introduction of two fingers into the abdomen, so the bowel was first withdrawn from the abdominal cavity, and then reduction was easily effected. At least one-half of the colon and an equal part of the small intestine were invaginated. The intestine was returned into the abdomen, and the wound closed with hare-lip pins and superficial sutures. No bad symptoms followed. Sickness ceased at once after the operation, flatus was passed on the second day, feculent matter on the third, and on the fourth the child was convalescent. Mr. Marsh thought that in this case the intestine was merely invaginated for thirteen days, and that inflammation set in twelve or fourteen hours before the operation. He concluded by referring to the necessity of undertaking the operation, if all other means had failed: first, in acute cases of not more than twelve or fourteen hours' duration; and, second, in chronic cases in which there had been no symptom of inflammation or strangulation of the intestine. The second case was under the care of Dr. Hilton Fagge and Mr. H. G. Howse. This case, an adult with intussusception, without symptoms of strangulation, had inflation performed three times without success. Mr. Howse thereupon proceeded to open the abdomen by a vertical incision opposite the umbilicus. The intussuscepted mass was readily felt and drawn out of the wound. It was only by a kind of kneading movement with pressure upon the distal end, that reduction was effected. The length of the included bowel was eighteen inches. The patient recovered without a bad symptom, the wound healing by first intention. In this case, hemorrhage from the bowels was absent, and in their remarks the two gentlemen showed it was of great importance not to delay the operation till hemorrhage occurred. Mr. Hutchinson related a third and fatal case, where the same operation was performed upon an infant six months old, after the other methods of treatment had failed. The intussusception involved the whole length of the colon and the ileo-cæcal valve. Considerable difficulty was encountered in replacing the intestines within the abdomen. They were accordingly pun-

tured with a hare-lip needle in two or three places. Death occurred six hours afterward, and the post-mortem examination showed evidences of recent extensive peritonitis. He was not inclined to consider the length of the incision as unimportant in the operation. There was no analogy with ovariotomy, where one had to deal with flaccid abdominal walls after removal of a large tumor. In intussusception, on the other hand, all the contents of the abdomen that were extended had to be replaced, and this replacement was difficult, just in proportion to the length of the incision, and the amount of the prolapsed bowel. He had sometimes to reduce the size of the incision before he could replace the intestines. The present was the only case in which he had punctured the intestines, and which he hoped never to do again, attributing the fatal issue to this puncture. The general opinion in the discussion seems to have been, that the operation should only be reserved for those cases where all other means had failed.—*The Lancet*, December 18, 1875.

Embolism of the Pulmonary Arteries following the use of Esmarch's Elastic Bandages to the Lower Extremities.—Dr. J. V. Massari reports at length the following case, which occurred at the clinique of Prof. J. Spaeth: A woman, 33 years of age, and in the sixth month of her eleventh pregnancy, was brought in suffering from hemorrhages, which were soon ascertained to be due to placenta prævia. Labor was artificially induced, the placenta separated, and the fœtus delivered in the afternoon. After the operation the patient fell into a condition of collapse, with fainting fits, and difficulty of breathing. An elastic bandage was therefore applied from the toes to the upper third of the thighs of both extremities, with the effect of relieving the urgent symptoms of exhaustion. Stimulants, beef extract, etc., were given, and there was no further hemorrhage. During the evening she complained so much of the pain of the bandages, that they were taken off, but had to be replaced at once on account of the threatening symptoms of pulmonary and cerebral anæmia. The next morning they were once more removed, and again replaced at once for the same reasons. During that day her condition somewhat improved, but at 11 o'clock at night, as she could not sleep from the pain of the bandages, that on the left leg was carefully loosened. At once her face became pale, in her wrists the pulse was lost, there was dizziness, panting for breath, and great complaint of pain and palpitation about the heart. After various remedies, including compression of the abdominal aorta, and restoration of the bandage, had been used, the pulse became perceptible again; but the bad cardiac and respiratory symptoms constantly increased, and she died after two hours. The autopsy was made thirty hours post-mortem. In the pulmonary arteries of the third class on both sides several clots from 3 to 4 mm. thick were found. The saphenous veins also and their radicles, in both thighs, were found dilated, convoluted, and filled with small, partially adherent clots, strikingly resembling those found in the lungs. The author's conclusion is that this thrombosis of the pulmonary arteries, which caused death, doubtless took place when the bandage was taken off the left leg; that the clots came from the region of the saphenous veins, and their formation there was favored by their varicose condition, and the long retention of the bandages *in situ*, being respectively seven and thirteen hours consecutively. The patient also showed an unusually low degree of recuperative energy. We should therefore be very cautious in the use of the elastic bandages where there are any varicose veins, because of the difficulty of completely emptying them as it is applied, and because blood so retained favors the formation of finer clots. The author refers to a similar accident reported by Prof. Kundrat, where flannel bandages had been used over varicose veins.—*Wiener Med. Woch.*, Nov. 27, 1875.

Angina Ludovici.—Mr. F. Murchison has studied a series of peculiar cases of sore throat that he saw among the residents of the Hebrides, during a two years' residence there. He is inclined to think the disease may be angina ludovici, as the symptoms strongly resemble those that have been connected with it by authors. It attacked children and young persons of various ages, the symptoms being uniformly the same. It affected the weak and anæmic in the proportion of six to one of the robust and healthy. All the cases seemed to be idiopathic and independent of any local lesion. They all occurred in winter, and in close succession, but were not confined to one isolated locality. The disease was ushered in by a chill, a stiffness of the muscles that move the tongue and throat, and a general feeling of malaise. After these incipient symptoms, there was a hard swelling in the vicinity of the submaxillary gland, in the gland itself, and in the entire floor of the month, so that the functions of mastication, deglutition, and respiration were seriously embarrassed. From this centre the disease gradually extended until the parotid and thyroid glands were involved. The tumor became harder and pressed the tongue upwards, making it very difficult to feed the patient. This condition continued for twelve days at the longest, when the seat of the inflammation and the throat bulged out like an immense goitre. Some cases ended in resolution, others in the formation and discharge of pus, but none in gangrene or in death. In each case a marked hardness remained, which proved intractable to any remedy except iodine and time.—*British Medical Journal*, December 25, 1875.

Paracentesis of the Pericardium.—M. Roger, in an interesting communication to the Académie de Médecine, has attempted to show in what cases this operation is indicated, and how much benefit may be expected from it. A large effusion into the pericardium affords the primary indication for the operation, but the diagnosis of this is not always easy. The arching forwards of the præcordial region, the flatness, and the functional disturbances are not always reliable signs. Dilatation of the heart, effusion into the pleura, and a mediastinal tumor have been mistaken for effusion into the pericardium. In considering the propriety of the operation, the nature of the effusion and the causes which produce it, as well as its quantity, must be taken into consideration. In hydropericardium and acute pericarditis the effusion can generally be made to disappear by proper treatment. Operation is most frequently indicated in chronic pericarditis, because in consequence of changes in the structure of the pericardium resorption of the fluid has become altogether impossible. Moreover, the pericardial lesions generally persist and prevent a complete recovery. In many cases the effusion is associated with tubercular growths in the pericardium. In operating, the parts to be avoided are the heart, the internal mammary artery, the pleura and lung, the diaphragm, and the liver. The puncture should be made in the fifth intercostal space, a little nearer the nipple than the sternum, and the instrument must be made to penetrate in a straight line from before backwards. This rule, however, may be varied when circumstances require it. The aspirator should be used, and the

trocar is to be as fine as possible. M. Roger has collated fourteen cases in which the operation has been performed, with one perfect and five imperfect cures. In these five cases life was prolonged, and death was finally caused by some concomitant disease. The accident that was most dreaded—puncture of the heart—has not been followed by fatal results.—*Journal de Médecine*, Dec., 1875.

Spider Bite.—Dr. Semple, of Virginia, reports five cases of the bite of a small black spider, in all of which very grave symptoms were produced. The symptoms were a sensation of pricking and itching at the seat of puncture, nausea, and abdominal pains, a sinking feeling in the epigastrium, præcordial pains of great severity extending to the axilla and down the arm, numbness, and in two cases partial paralysis of the arm, apnœa, a very quick, small, and almost imperceptible pulse, great anxiety, and coldness of the surface. The treatment consisted in large doses of whiskey and ammonia, with the bromides of potassium and ammonium in two of the cases. In one case, death being imminent, ten minims of strong aqua ammonia were injected into a vein of the arm. Reaction began immediately, and in fifteen minutes the pulse was full, regular, and only 77 to the minute, the skin was warm and moist, and the respiration natural. The only unpleasant sequel was a small slough, caused by the escape of a few drops of the ammonia into the cellular tissue. All the cases recovered.—*Virginia Medical Monthly*, Dec., 1875.

Parturition in Traumatic Paraplegia.—Drs. Birkerd and C. Lange communicate the details of an interesting case, which shows that parturition may be accomplished by the unaided efforts of the uterus. The patient was twenty years of age, and at the close of the eighth month of pregnancy, when she was upset and thrown into a ditch, a wagon-box falling on her back. After removal to the hospital an examination was made. The patient was lying motionless on her back, in a sleepy condition, able to move her arms, but not the lower extremities. Sensation was very much diminished in the inferior extremities, and she complained of a pricking, buzzing sensation in them. There was also paralysis of the rectum and bladder, and considerable impediment to the respiration. At the level of the fifth and sixth vertebræ there was great tenderness, so much so that pressure on them caused her to scream, and a pain darted through the breast. No mobility or crepitus could be discovered over the vertebral column.

Labor was induced, four days after the injury, by vaginal injections of warm water. The mouth of the uterus dilated, the membranes ruptured, the head came down, and, by the aid of forceps, the delivery of a living female child was completed. The uterine contractions were quite forcible, but could only be detected by vaginal examination, and the mother did not appear to notice what was taking place, talking about other matters. No assistance was afforded by the muscles surrounding the tympanitic, distended abdomen. The placenta was quite adherent to the uterus, and was removed in half an hour by the hand. Very slight hemorrhage. Patient died five days after the delivery. No post-mortem.—*Hospitals-tidende*, Sept. 22, 1875.

A New Operation for Varicose Veins. M. Rigaud, of Nancy, at a recent meeting of the *Académie des Sciences*, proposed a new and simple operation for varicose veins, viz.: simple isolation of the vessels from their sheath. This isolation will invariably produce a coagulation of the blood, not by setting up a phlebitis, nor by retarding the circulation, but by the alterations in the venous walls consequent on cutting off their source of nutrition. The experiments were made upon dogs, the vessel being in each case completely separated from its sheath for a space of two to three centimetres. The first phenomenon noticed was a considerable dilatation of the denuded portion, due to a paralysis of the middle coat. The external surface then became dull, violet or brownish red in color, and gangrenous in spots. As they no longer received any blood through the vasa vasorum, the external and middle coats necessarily became necrotic, and involved in a secondary process of necrosis the endothelium, which derives its nutrition by imbibition from the middle coat. Up to this time the circulation of the blood through the vein had continued, but as soon as the endothelium by its necrosis became a foreign body, coagulation of the blood began and gradually extended upwards and downwards, according to the known physiological laws.—*Gaz. Hebdom.* No. 45, 1875.

A New Kind of Grass-Green Sputum.—Dr. O. Rosenbach, assistant at the Medical Clinique of Jena details the following case, and calls attention to the difference between this and the somewhat similar phenomenon reported by Traube. The patient suffered from bronchial asthma, with attacks of severe dyspnœa and consecutive emphysema of the lungs. During the attacks the sputa were scanty, glassy, very tenacious, of a whitish color, covered with a thick stratum of foam, and themselves filled with air-bubbles. They also contained lumps and plugs of a gray color, in which, as also in the fluid portion, were found numerous pointed octahedral crystals, as described by Leyden. As the attack subsided, the sputa became more abundant, more muco-purulent and fluid, and contained fewer crystals. After allowing such a specimen of the sputa from late in an attack to stand for twenty-four hours, while still free from offensive smell, he found it had become completely green, the coloration being limited to the fluid portion. The fluid was neutral to test paper, but an alkali rendered the green more intense. Under the microscope were found vibriones in abundance, and also light-green spores and larger round masses of small, highly refracting granules, which showed a great resemblance to the clusters of spores. The mucous, pus and epithelial cells were also filled with these small green granules, and they were capable of resisting the action of agents which destroyed the cells. Dr. R. therefore connects the color of the sputa with the clusters of spores, and he found he could propagate them and produce the same coloration in the sputa of a phthisical patient and in milk.—*Berliner Klin. Woch.*, November 29, 1875.

Salicylic Acid for Typhoid Fever.—Dr. T. J. Pitner, in a letter to the November number of *The St. Louis Med. and Surg. Journal*, from Leipsic, speaks of the use of salicylic acid for the treatment of typhoid fever, in the wards of the hospital, which are under the direction of Prof. Wunderlich. The results are described as remarkable. The most striking and uniform effect was a fall in the temperature within twenty-four hours after the administration of the remedy. The dose was one gramme (fifteen grains) in solution in water, repeated three or four times during the day. The average decrease in the temperature is stated to be about three degrees Fahr., though it sometimes fell as much as from 104 to 99 Fahr. The fall of temperature was accompanied by a like ameliora-

tion of all the other symptoms. Prof. Wunderlich, in speaking of the value of the remedy, declined to express himself definitely as to its merits, "but mentioned the fact of the fall of temperature as full of promise for its usefulness." It had only been on trial for two months.

A Case of Hæmatidrosis.—Dr. M. Tittel reports the following case: The patient was a strongly-built man of twenty years, belonging to a well-to-do and healthy family. He stated that when twelve years old he had an eruption of red spots upon the face, and they were circumscribed, non-elevated, painless, and did not itch. At the time of their appearance his face was extremely pale, and he suffered from great fatigue and headache. They disappeared after two months without medical treatment. He also stated that a year later, after being severely chastised by his father, blood at first actually spirted, and afterwards ran steadily and slowly, from the dorsal surface of his left hand, although there was not the slightest wound on the hand. This lasted for some days, and then stopped. It was succeeded by great mental depression and noticeable sluggishness. He stated that he subsequently had other hemorrhages, and that they assumed the character of blood-sweating, so that his shirt, his neck-handkerchief, and his stockings, would get of a rusty color. Dr. Tittel had at length an opportunity of witnessing one of these attacks personally. He found that it was accompanied by a decided diminution in the frequency of the pulse, viz., from 60 to 40 beats per minute. The hands and feet were somewhat swollen. The surfaces most affected were the throat, the volar surface of the hand, the anterior surface of the leg and the feet. At the same time the patient complained of fatigue, headache, dizziness, weakness, and disinclination for work, and these symptoms always preceded an attack. The stools and urine were free from blood. On microscopic examination, the discoloration of the clothing was found to be due to blood, and, on examining the patient, the doctor saw blood actually oozing from the orifices of the sweat glands on the forehead, and even more distinctly in the palm of the left hand—an observation which was confirmed by Prof. Wagner and several other physicians named. On reviewing the literature of the subject, the author finds many cases of greater or less authenticity recorded, and a prevalent impression among the older writers that such hemorrhages are connected with violent mental disturbances, or with physical excesses, or, again, that they are in the nature of vicarious menstruation. In the present case the microscope showed that the hemorrhage was through the canals of the sweat-glands. He can throw no light upon the etiology of the affection, and can only ascribe it to a lesion in the innervation of the capillaries of the skin. The patient subsequently joined the artillery, and had no more hemorrhages.—*Archiv der Heilkunde*, Nov. 22, 1875.

Hooping-Cough treated by the Iodide of Silver.—Dr. Robert Bell, of Glasgow, has treated over one hundred cases with this substance, and with uniform success. He uses no other remedy, except occasionally ten or fifteen grains of bromide of potassium at bedtime. In almost every case treated by the iodide of silver, the cough lost its hoop in four weeks, and was well in six weeks. Similar results were observed where two or more cases occurred in the same family. One eighth-of-a-grain doses three times a day were given, in a case illustrative of the treatment. He says he does not attempt to explain the precise action of the iodide, but that hooping-cough being a disease of the gastric periphery of the pneumogastric nerve, the silver salt acts as a sedative to this morbidly sensitive nerve, preventing reflex irritation being conveyed to its pulmonary ramifications.—*The Obstetrical Journal*, December, 1875.

Great Development of Amœbæ in the Large Intestine, associated with Dysentery.—The following case is reported by F. Lösch, from the clinique of Prof. Eichwald, of St. Petersburg: A farm-laborer, twenty-two years of age, contracted in 1871 an obstinate diarrhœa which lasted six months or so, and left him so weak that he was not equal to military duty. He recovered somewhat, however, and became a lumberman. The wet and cold to which he was exposed in this employment brought back his trouble in the form of severe dysentery, so that at the beginning of November, 1873, he was received into the hospital. His stools at this time were found to be scanty, fluid, foul-smelling, and of a reddish-brown color, and to contain yellowish-white and grayish-red masses of mucus and pus. On microscopic examination there were found large cell-like bodies, in part free and in part enclosed in mucus, which, from their peculiar motion, were recognized as animal parasites, in fact as amœbæ. All the ordinary modes of treatment for chronic dysentery were used without more than a transient benefit, and then carbolic acid was given internally and by enema. This did no better. At the same time it was observed that there was a certain relation between the quantity of the parasites and the intensity of the symptoms of the disease, both increasing together. This circumstance with others, and with the result of experiments made upon dogs, induced the physician to give quinine, thinking it unlikely that he could cure the disease until he had destroyed the parasites, which seemed to keep it up. It was, therefore, given by mouth and rectum. The results were very gratifying, the patient improving in every way, and by the end of ten days not an amœba could be found in the stools. Still they had not all been destroyed, for after the quinine had been discontinued for a few days, they returned in full numbers, and all the bad symptoms returned with them. In fact, the patient's condition became so bad that transfusion was resorted to about the middle of February to save his life. Soon after this he began to have a cough. On March 9 he had a chill, followed by fever and the development of pleurisy, with effusion; and, strange to say, at this time the character of the stools changed to that of typhoid-fever evacuations, and the amœbæ entirely disappeared from them. The author can offer no satisfactory explanation of this fact. However, the effect on the bowels was most favorable, the passages soon becoming almost normal in character and frequency. On April 12, however, the patient died from cheesy pneumonia. At the autopsy the large intestine exhibited inflammatory thickening of its submucous layer; there were ulcers and cicatrices, and abundant pigmentation, also numerous mucous cysts, all these appearances being most marked in the descending colon, and the vicinity of the sigmoid flexure. The author gives a very detailed account of the amœbæ found in the stools, and discusses them with this conclusion, viz., that they did not correspond with any forms hitherto described, and therefore he names the variety *amœba coli*. He is satisfied that the amœbæ had an essential influence upon the symptoms of the disease, keeping up the inflammation and preventing the ulcers from healing. His view of the case, as a whole, therefore, is that the patient first contracted the dysentery, and that subsequently the amœbæ found entrance, and kept up the inflammation.—*Virchow's Archiv*, Nov. 10, 1875.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, February 26, 1876.

THE ETHICS OF CONSULTATION.

THE relations which we should sustain to each other, especially in the matter of consultations, are so important that we cannot have our attention directed to them too often. If all the medical men in the land were actuated by the proper spirit, there would be no difficulty in settling doubtful points of etiquette, and there would be no such abuses of privilege, and no such violations of confidence, as we are so constantly compelled to notice. As we have often said, the very existence of a code of ethics in our profession is a reflection upon the honesty of our intentions; but unfortunately there is a necessity for it, in consequence of advantages which are often taken by some of the meaner spirits. There is so much temptation with the latter for unfair dealing, there is no wonder that there are many abuses to correct and many reforms to advocate. In some sections of the country there is no delicacy whatever in directly interfering with each other's rights, and physicians do not hesitate not only to denounce each other's practices in the sick room, but to engage in professional fights in their village papers. But with these we have no special concern at present. We only desire to call attention to some of the less overt violations of professional obligations in regard to consultations, because they are more common, and, from the fact of not being so readily appreciated and detected, are really more dangerous.

Take the following example: A young man, actuated by the strictest regard for the good of his patient, asks for a consultation, and chooses for his consultant a gentleman of experience and standing. In securing the object of his choice he takes pains to impress upon the patient and his friends the importance of having an opinion such as this distinguished member of the profession can give. The consultation is held, and the younger member behaves himself in a becomingly respectful manner towards one who he acknowledges is his superior, and is satisfied, as he certainly has a right to be, that no advantage will be taken of the circumstance by the new-comer. The patient's friends are not so easily satisfied, and, knowing something of the conventional trammels of etiquette, manage to secure a private interview, which, with shame be it said, is granted.

"Well, doctor, what do you really think of John's case?"

And this is the reply:

"I think that the patient will get along. The doctor seems to understand the case very well for a young man. It is true there was some little difference of opinion in regard to the plan of treatment, but the doctor very kindly listened to my suggestions, and will doubtless heed them."

Then follows some smiling allusions to medical etiquette, how wrong it is to destroy confidence in the attending physician, how necessary it is that the present attendant should be continued, if for no other than ethical reasons, and the consulting physician bows himself out, leaving his unsuspecting victim with a damaged professional character. We do not wish to be understood as drawing upon our imagination and making this a supposable case. On the contrary, the example is founded on a fact, and the dialogue is reported almost exactly as it occurred, and by one of the friends of the patient who was present at the time. And this is not an isolated instance of its kind. Numerous examples of the same sort of double-dealing have come to our knowledge, and they are constantly occurring all over the country.

It is unnecessary to refer to the many similar opportunities for the consultant to make capital in the sick room, by acts which are not punishable by the code, a timely shrug of the shoulder, a significant elevation of the brow, a peculiarly anxious attention to the patient's history of his case, and many other matters. Neither is it necessary to say how often they take advantage of the situation. These are acts which are capable of a charitable construction, and we naturally give them the benefit of a doubt. The patient, too, is magnanimous in supposing that the consulting physician is doing his best to suppress his natural feelings. But when words are spoken, and distinct impressions conveyed, the case is different, and we have something positive upon which to base assertions.

It may seem a bold thing to say, but we nevertheless believe it to be true, that the desire for professional advancement and pecuniary gain is so strong with some of the profession, that almost every consideration is lost sight of in its gratification. Medical etiquette, it is true, offers a slight barrier to the base purposes of unprincipled men, but even this is easily broken down. There is, too, a certain class of professional men, who are bold, ambitious and grasping, who are always willing to help others a little, to be helped themselves a good deal, but so soon as this

relation of *quid pro quo* is disturbed, even medical etiquette cannot prevent the quiet crowding down of one who aspires to something more than second-rate. When patronage ends, war generally begins.

It would seem, as far as these practices are concerned, at least, that the ethics of the profession were made to enable the larger fish to feed upon the smaller, so that the latter could never arrive at maturity.

A NEW TIME-SAVING METHOD OF SECURING A DIPLOMA.

Probably there has been no more original plan of saving time in the acquirement of a medical education than that inaugurated at Louisville, Kentucky. In these days of the wholesale manufacture of doctors, it is interesting to know of some of the secrets of the trade, some of the means adopted by respectable colleges to increase their constituency and swell their incomes. We believe this enterprising Western town is entitled to the credit of an innovation, which consists, as we understand it, in crowding two courses into one year, at the end of which time, both courses being full ones, the student may graduate. It is managed in this manner: The Louisville Medical College gives a winter course in the regular way, and the Kentucky School of Medicine gives a spring course. This may appear perfectly proper, until we know that but one faculty controls both institutions; that is to say, the professors of the winter course in the Louisville Medical College are (with one exception) the professors in the spring course in the Kentucky School of Medicine.

Declaring themselves two distinct institutions, each capable of giving a full course and a medical degree, there is nothing whatever, so far as we can see, to prevent the winter-course students in one school from becoming spring-course students in the other, and, at the end of the latter course, of graduating in medicine. The excuse for thus infringing upon the rights of medical education is presented with all the candor of gentlemen who are evidently determined to cater to the wants of those students who wish to be put over the road in the shortest possible time. Among other reasons, the announcement presents this one: "Because there is no known reason why students should be compelled to defer attending a lecture course until October of each year." Certainly not, except he has commenced one the year before at that time. And again, the same announcement says: "Because large numbers of the best young men are always anxious to complete their collegiate studies without the intermission of the summer months." We have no doubt that there are a large number of the young men whose wishes in regard to the through-ticket system would be gratified, but we are hardly prepared to admit that they are the "best" men.

What, however, is more amusing than anything else connected with this copartnership scheme is the following: "Lastly, because it is believed that while any chartered medical institution will justly forfeit the respect, confidence and support of the profession if it gives two graduating courses in one year, the Kentucky School of Medicine now reorganized will act most judiciously and with manifest propriety [*sic*] by selecting the spring as the period of its single annual course." Here the passengers for the through trip stop for refreshments, have their tickets punched, and take the forward cars. This is the only change necessary over the new branch of the road.

Another striking evidence of copartnership between the two schools is the following official statement:— "The graduate of this college [Kentucky School of Medicine] will every year receive in addition to his own diploma the *Ad Eundem* degree of the Louisville Medical College, whose annual session, commencing every September, closes in the last week of the following February. This *ad eundem* degree is furnished without cost."

Dr. Cowling, the editor of the *Louisville News*, in discussing this question of identity, makes the following comment:

"We confess that we are too dull to see where the claim for separate existence comes in. We feel rather sure that we cannot praise the 'Louisville' without making the 'Kentucky' blush, nor blame either without expecting to encounter the swords of both. The phenomenon has in common brain, heart, and lungs. We will be perfectly honest in calling it the Louisville-Kentucky School of Medicine. *It holds two graduating courses in one year; it graduates students of medicine in nine months, and presents each with two diplomas.*"

This, then, appears to be the gist of the whole matter, and our Western brethren deserve the credit of initiating the easiest and quickest method of obtaining a double-headed diploma of which we have yet heard.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, January 22, 1876.

Dr. Charles K. Briddon, President, in the Chair.

CANCER OF TONGUE AND JAW—OPERATION FOR REMOVAL—DEATH—OPIUM-EATING.

Dr. Post presented several specimens, the first of which was one of malignant growth of the floor of the mouth, the lower surface of the tongue, and the parts in front, involving the bone itself, and the integument in front of it. The latter condition was not recognized, however, until the time of the operation. The patient, a male, æt. 50 years, was admitted to the Presbyterian Hospital three months since, presenting an indurated ulcer below the tongue, concerning the diagnosis of which between cancer and syphilis there was at first some difficulty. Anti-syphilitic remedies were employed, but with no marked effect, and the

patient's condition after a time grew gradually worse, being unable to swallow except with great difficulty, and suffering a great deal of pain. The suspicion of the malignancy of the growth being confirmed, and the prospects of the patient being desperate, an operation was determined upon, for the purpose of a temporary relief to his sufferings. It was performed by dividing the lower lip from each angle of the mouth downwards, and making a section of the jaw at the corresponding points. The tongue was drawn forward, a large portion of which was removed. It was then found that the morbid growth had perforated the jaw and involved the integument in front. A considerable but not an excessive quantity of blood was lost in the operation.

On the morning after the operation the patient was able to swallow without much difficulty. His pulse was fair, but he was quite restless, which latter was in a measure accounted for by the absence of a large portion of his tongue and the drawing forward and fixing of the remaining portion to guard against the danger of falling into the larynx. The patient died in less than twenty-four hours after the operation, from nervous prostration, which probably was somewhat connected with the habit of opium-eating which he had acquired.

EPITHELIOMA OF TONGUE—OPERATION.

The second specimen was one of epithelioma of the base of the tongue and mucous membrane of the sublingual gland, removed by operation from a female, aged 73 years. The disease was of five months' duration, attended with but little pain, and was not ulcerative. A simple, straight incision was made in the median line of the chin, the jaw divided and drawn asunder, when a platinum wire was attached to Dawson's battery and passed around the growth under the tongue. Contrary to expectation there was a good deal of bleeding, necessitating the ligaturing of the lingual and sublingual arteries. The other portions of the tumor were removed without difficulty, the severed ends of bone wired together, and the integument united by sutures. The prospect of union by first intention was good.

ENLARGED PROSTATE—FALSE PASSAGES—CALCIFIED TUNICA VAGINALIS.

A third specimen was taken from a man, aged 73 years, who came into the hospital suffering from symptoms of enlarged prostate and partial retention of urine. After admission, and after the patient supposed that he had entirely emptied the bladder, Dr. Post introduced a catheter and drew off twenty-four ounces of urine. There was a difficulty in introducing the catheter, other than that occasioned by enlarged prostate, the instrument being deflected to the right by a false passage. The patient also had a sarcocele of one side and a calcification of the tunica vaginalis. He died a few days after entering, from disease of other organs than those to which attention had been primarily directed.

The following were found on autopsical examination: Extensive tuberculosis of lungs, with secondary pneumonia, dilatation of right ventricle of heart, with a large clot in right auricle, probably ante-mortem. The kidneys were the seats of waxy degeneration. The tunica vaginalis was calcified, and there was a false passage running parallel with the urethra and communicating with it at intervals by four distinct openings. The prostate was enlarged, had a large pouch behind it, but in place of the enlarged third lobe there was found an extra growth alongside, which was somewhat pedunculated, and doubtless acted as a valve during life. The bladder was sacculated, as might be inferred from the damming of the urine after the patient supposed the viscus empty.

MALIGNANT DISEASE OF ANTERIOR WALL OF BLADDER, WITH SYMPTOMS OF STONE.

A fourth specimen was one of malignant disease of the anterior portion of the bladder, which in consequence of a calcareous deposit on the surface of the growth, with other rational symptoms, gave some of the physical evidences of calculus. The patient was repeatedly examined with the sound, but with somewhat varying results. In the first examinations the instrument having grated upon some solid and rough surface, the suspicion of calculus was apparently well enough established to warrant the introduction of the lithotrite. Two operations were performed with this instrument at different times; at the first a minute calculus was extracted, and at the second another was instantly seized, crushed, and lost. Although at different times the instrument struck, and always in one situation, what appeared to be a calculus, the diagnosis was not certain. With a view of clearing up doubts upon the subject, Dr. Post introduced his hand into the rectum, with the view of examining the bladder, but the fingers were so cramped in a cone-like position that nothing satisfactory could be gained. On subsequent sounding, Dr. P. felt so well assured that an encysted stone existed, that he performed cystotomy with a view of making a free outlet for morbid discharges, and of removing the calculus if one should be found. The usual bilateral incision was made, but the perineum being very deep the position of the supposed stone could not be reached with the finger. The forceps was then introduced, and a number of efforts made to disengage the foreign body, but with no avail, and as far as lithotomy was concerned, the operation was unsuccessful. The patient, however, expressed himself much relieved by the free discharge of the products of inflammation through the wound. In the course of ten days after, several hemorrhages occurred; these were followed by chills, slight increase of temperature and pulse, and the patient finally died, and what was supposed to be encysted calcareous disease was a malignant growth encrusted with calcareous deposit. The patient was 53 years of age.

FIBRO-RECURRENT TUMOR OF GLUTEAL REGION.

A fifth specimen was a fibro-recurrent tumor removed from the gluteal region of a woman aged 35 years. The growth was secondary, a previous operation having been made a year before.

Dr. Post lastly presented two wedge-shaped portions of bone removed by operation from the knee of a man, 50 years of age, for the purpose of correcting a deformity and uselessness of a limb, the seat of bony anchylosis. An H incision was made over the knee, dividing the ligamentum patellæ. It was then found that bony union existed with one of the condyles and the corresponding portion of the tibia, while in the opposite condyle there were some traces of synovial membrane. The patella itself was free. A wedge-shaped portion was removed, but not being sufficient to bring the leg nearly in the straight position, another wedge was sawed out. The divided portions of bone were then brought together with wire sutures, the wound closed, side splints applied, and the limb placed in a fracture-box. There were no signs of

constitutional disturbance after the operation, and the prognosis was good.

Dr. Mason referred to a calcified tunica vaginalis in the museum of Charity Hospital.

Dr. Weir remarked that Dr. Post had given him an opportunity in the case of malignant disease of the bladder to hold the forceps after it had been introduced, and he felt distinctly the grating sensation. He had been deceived once before in a somewhat similar case, after the division of a stricture.

Dr. Burchard referred to a case somewhat similar to this one of Dr. Post, in which Prof. Diddell, of Strassburg, performed the median operation for lithotomy, and removed the growth, likewise situated on the anterior surface of the bladder. The recovery of the patient was apparently complete.

CANCER OF THYROID GLAND—DEATH FROM ASPHYXIA.

Dr. Weir presented a specimen of cancer of the thyroid gland, removed post-mortem from a woman, 68 years of age, a patient of Roosevelt Hospital. The disease was of less than ten months' duration, had grown with great rapidity, and during the last two months of life caused considerable dyspnœa. At the time of her admission into the hospital, in June last, the tumor measured five and a half inches across, and one and a half on its vertical diameter. It was uniformly hard, encircling the trachea and neck as a large collar, terminating rather abruptly on the right side, and fading into the surrounding tissues on the left side.

During her stay in the hospital she suffered from repeated attacks of dyspnœa, but as these were markedly mitigated by opiates there did not seem to be any urgent need for operative interference until she was sufficiently improved in her general condition. Finally, the day was fixed for the operation, but two hours before the time of the latter she died in a fit of dyspnœa.

At the autopsy the growth, which was truly cancerous in character, was found to involve the trachea, passing between it and the œsophagus, not involving the walls of the latter, but encroaching upon the calibre sufficient to produce the dysphagia of which she complained during life. Dr. Weir then referred in detail to the operation he intended to have performed had the patient lived, and concluded by remarking upon the extreme rarity of the disease in question.

ORIGIN AND PROGRESS OF MAMMARY CANCER.

Dr. Delafield presented a section of the mammary gland, showing the origin and progress of true cancer of that organ. There was no extra development of connective tissue or connective-tissue cells, and the purely glandular element of the growth was very satisfactorily exhibited. The gland ducts were all enlarged and completely filled with epithelial cells. The same was the case with the acini. It was, then, an example of true cancer, involving the greater part of the mammary gland, beginning as an increase in the epithelial cells of the ducts of the gland and acini of the gland, and going on as an infiltration of the lymphatics with these same cells. The disease originated in the ducts of the nipple, and involved the lymphatics secondarily. The organ was removed by Dr. Weir.

Dr. Weir stated that the patient was 45 years of age, unmarried, was considerably emaciated, but in fair health, and no secondary glandular enlargements.

BRIGHT'S DISEASE AND SYPHILITIC PACHYMENINGITIS.

Dr. A. H. Smith presented a brain, removed from a male patient of St. Luke's Hospital, admitted Sept. 25th, and aged 35 years. For two years before his admission he had been passing more than the normal quantity of urine, and his urine having been examined about that time he was told that he had diabetes. The quantity of urine fluctuated very much during the whole of his sickness; at times it was equal in quantity, as he said, to two chamber-potfuls in twenty-four hours, while at other times it would be normal.

Eighteen months previous to admission he began to complain of pain in his head. His general health deteriorating he went to the country to recruit, but without success, and when he was seized with a slight convulsive attack, becoming alarmed, he repaired to the city again and there sought admission into the hospital. During the first day he passed 86 ounces of urine; the second day, 56; and the third, 30; and the fifth day it was reduced to 17 ounces. No sugar nor albumen was discovered.

Ten days after admission he was seized with a uræmic convulsion, when the urine became albuminous, and smooth, hyaline casts made their appearance. From this time he began to be stupid, and this condition increased until he died.

The kidneys were found, on post-mortem examination, to be in the condition of chronic Bright's disease. All the other organs were healthy, except the brain. On the anterior aspect of the left hemisphere a large patch of the dura mater was very much thickened and adherent to the brain, the latter being softened at the point of contact. Just above the left occipital protuberance the scalp was adherent to the skull, marking the site of the kick of a horse when a boy. The history of syphilis was not satisfactory, although there were numerous suspicious spots over his body, and there was an abatement of the symptoms under specific treatment.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, February 11, 1876.

Dr. F. P. Foster, Vice-President, in the Chair.

FACTS AND SUGGESTIONS REGARDING THE TREATMENT OF THE INSANE AT OUR CITY INSTITUTIONS.

The object of the paper read by Dr. R. L. Parsons upon the above subject, was to show what improvement has been provided for the better care of the insane during the past year, particularly at the New York City Lunatic Asylum upon Blackwell's Island, and to give suggestions relative to what is yet required in order that this unfortunate class of persons may be properly cared for and maintained.

Among the reasons for bringing this subject before the medical profession was the pungent one that medical men know too little upon this subject.

The first improvement mentioned was the introduction of the pavilion system, and it was believed that by this means certain classes of patients can be more easily cared for and supervised. Two pavilions have been constructed, three more are in process of construction, and each has an estimated capacity for the accommodation of sixty persons. In a pavilion having a large central hall with wings upon either side, much less air-space is required for each person than when the building is cut up into rooms. These pavilions at present are heated by means of stoves, but perhaps hot water might be substituted with advantage. The average cost of a pavilion to accommo-

date sixty persons is $6,000, and this was regarded as economical, even if it became necessary to remove them every few years and construct new ones. Another advantage claimed for them was that they are more cheerful and home-like, and there is less appearance of restraint than in a building containing several stories and a multitude of rooms enclosed by heavy stone-walls. Another advantage is the facility with which patients can be got out into the open air. These were the chief advantages urged in favor of the pavilion system, and they are essentials in the proper treatment of the insane.

There are some disadvantages, such as the fact that they require a greater space to accommodate the same number of patients; the labor attending the heating is greater; and the labor in distributing the food is greater. The first cost of heating apparatus is less. The greatest difficulty attends the proper distribution of the food. The difficulty of supervision by the medical staff is also somewhat increased. Another disadvantage consists in the difficulty of securing efficient supervision during the night, for night-watchmen are required for each pavilion, and night-watchers to prevent interference with the fires, etc. If the room is heated by steam no night-watchers would be required.

Heating by steam also has its disadvantages. For it necessitates covering the pipes with some fabric, and with this comes the difficulty of keeping such covering free from dust and organic matter. Probably the organic matter which comes in contact with the pipes and becomes roasted will not act prejudicially to the best interests of the occupants, but the dust may be a serious disadvantage. The coverings of the pipes, therefore, should be fitted in such manner that they can be easily removed and replaced.

Radiated heat exercises a stimulating influence upon the tissues, while conducted heat, rarefied air, is enervating, and tends to produce relaxation of tissues.

The temperature of a room in which there is an open fire is equally comfortable at 60° F. with a room heated to 70° F. by means of conducted heat

The use of steam radiators for heating purposes was recommended.

There are three considerations which should enter into the making-up of the diet-list.

1. Sufficient quantity of nutritious food;
2. As great variety as practicable;
3. The food should be cooked well, and with as much variation as circumstances will permit. As a corollary, the manner of serving the food should be as nearly like that employed in ordinary life as possible. Ripe fruits are exceedingly beneficial. Extra diet upon holidays, accompanied by extra entertainments, are fully appreciated, and contribute very materially to the general improvement of these patients.

A hall has been constructed in which gymnastic exercises can be taken, and theatrical performances and concerts given for the amusement of the patients. Amusements are of the greatest possible benefit in the treatment of the insane.

Improvements have been made so that the patients now have red flannel under-clothing when sick in bed, and cotton flannel when in ordinary health.

Excited patients are under constant supervision, and provisions are now made for this class, which are more complete than they have been for many years.

There is a feeling abroad, and it has also taken an official form, that the dormitories for the insane of our city are nothing more than almshouses, and that their occupants should simply be regarded as paupers. Hence there is a feeling that only such provisions should be made for the insane as are merely necessary to sustain life. For, it is urged, if more is done for paupers, our institutions will be filled to overflowing, and the crowd will increase with increasing accommodation. While this may be true with reference to the inmates of almshouses, the principle is not applicable to lunatics. Only a very small proportion of the insane were paupers before becoming insane, but were nearly all useful and law-abiding citizens. Making generous provisions for the care and cure of the insane is really the best method that can be adopted to reduce the number of insane patients.

The present expense for maintaining each patient one day, including food, medicines, clothing, salaries of attendants and medical staff, is a little over twenty cents.

Parsimony, and not economy, is the word to be used when speaking of such stinted expenditures. What is really needed is one attendant to every twenty patients. The force of medical attendants is not sufficiently effective, and should be very much increased.

The present capacity of the wards of that institution is not sufficiently ample to prevent the necessity of making beds upon the floor for the accommodation of 320 patients every night.

Although pavilions are adequate for the care of quiet patients, the most approved structures are necessary for the proper care of the excitable patients. Such buildings are necessary for the proper management of this class of patients as will render it possible to completely isolate them from each other.

It remains a noteworthy fact, that although improvements have been secured, such as better diet, better clothing, better domiciliary accommodations, a hall in which relaxation and amusements can be furnished, yet the New York city institutions for the insane have most inadequate provisions for the proper management of their inmates.

Dr. Ludlum drew attention to the fact, that a gentleman in London had proposed to furnish food in a hot state at any point twenty miles distant upon a direct line of railway. The food is placed in tin boxes, which are placed within wicker baskets that are lined with felt, and covered tightly with a cover lined with the same material. Dr. Ludlum inquired of Dr. Parsons whether this plan had ever been tried upon the Island?

Dr. Parsons replied that the precise plan had not, but that he had a similar arrangement for transporting food, so that it might be delivered to the patients while warm.

Dr. A. C. Post referred to the fact that in Norway the peasants were in the habit of carrying their food in felt-lined vessels, where it would retain its heat for several hours. The doctor further remarked that an objection to steam radiators for heating purposes was the fact that radiators do not secure any ventilation. They simply heat the air in the room without producing any circulation, except the imperfect circulation set up in the air which comes in contact with the radiators, and circulates over it. A proper thermal ventilation is secured by heating a room with air which has been heated by passing over hot pipes. Ventilation by opening windows and doors establishes currents which are oftentimes injurious to health. Warm air is just as pure as cold air, although it contains less oxygen, and it is much more comfortable. Open fires would be preferable for heating and ventilating purposes, but in our cold climate they could not be adopted, especially in our large institutions, without an enormous expense for fuel.

Dr. McDonald corroborated the views of Dr. Parsons, as expressed in the paper, and regarded it as very poor economy to bring the supplies and attentions for the insane down upon a level with those afforded for paupers. He also referred to the introduction of the new diet-list into the asylum for insane on Ward's Island, and stated that the average death-rate for nine months previous to its adoption was 14 a month. The first month after the introduction the death-rate was reduced to 10, the second to 8, and the third to 4, and that at a season of the year, October, November, and December, when the highest death-rate was expected. The expense for food was increased, but the bills for medicines and liquors were notably diminished in size.

Dr. Beard remarked that the corps of attendants at our institutions for the treatment of the insane was not sufficient to permit any scientific experiments of value to be made. In a majority of asylums the treatment is thoroughly routine, and scarcely any advance has been made for these many years. Now that we know insanity to be a disease of the brain, it would seem that much advance might be made by well-directed experiments with reference to the effects produced by various remedies. In this direction there is an immense field for operation in our asylums, providing they were furnished with an adequate number of assistants. The single item of improvement in diet has been followed by marked benefit, and doubtless much benefit could be derived from the use of various drugs, and watching carefully the results obtained. Not only could advances be made in the treatment of the insane, but in the treatment of nervous diseases in general.

Dr. E. C. Seguin regarded an increase of the medical staff as one of the most important of the subject which call for reform in our public institutions. This evil is of a twofold nature: 1, overwork; 2, insufficiency of remuneration. In our insane asylums there are from four to six hundred inmates under the supervision of one man. The result is that the superintendent can give but little information concerning the patients, or has but little at his command except what is obtained by reference to the books. The assistants do not number more than two or three, and with such a number of patients it is impossible to give thorough care and investigation to each patient. The fact that some are chronic cases, requiring but little or no attention, does not help us out of the dilemma; for many of these cases which are regarded as chronic are in a condition in which proper attention would be of immense benefit. Many instances of cure have occurred after the patient has been insane for eighteen months or two years. The number of assistants to properly carry out artificial feeding in such cases as require it; to use the hypodermic syringe, as in the later treatment of melancholia by means of hypodermic injection of morphia; to weigh the patient, use the thermometer, sphygmograph, etc., etc., is entirely inadequate.

In many of these institutions there are no provisions for a library, and in scarcely any are there adequate provisions for pursuing pathological investigation. These are some of the obstacles to be overcome, if the greatest benefits are to be given to the inmates of our insane asylums.

Non-Impregnated Uterus.—At a recent meeting of the London Obstetrical Society, Dr. John Williams stated that the multiparous uterus could be diagnosticated from the nulliparous by the permanent alteration of the arteries of the former.

Reports of Hospitals.

BELLEVUE HOSPITAL.

Notes of Practice and Peculiarities of Treatment.

An unusual complication of typhoid fever—capillary bronchitis.

This case illustrated one or two points of interest, which will be mentioned in the history, but the special item was an unusual complication.

A female patient, æt. 15, was admitted to the hospital, Aug. 28, for some local affection, which had no bearing upon her subsequent illness. On Sept. 3 she walked about the ward some, and also up to Sept. 15, but at that time suffered somewhat from diarrhœa; had been listless for a day or two and appeared to be very weak. She had also had a trifling amount of bronchitis. In the afternoon of the fifteenth or eighteenth day after admission, it was noticed that she was extremely feeble, manifested some tremor, complained of some pain in the chest, and also of feeling cold. It was suspected that pneumonia might be developed from the increased severity of the symptoms, but physical examination determined only an extension of the inflammation to the smaller bronchial tubes. On Sept. 16 her condition was worse, respiration rapid, face flushed, and râles so abundant that a vibratory motion was communicated to the walls of the chest, which could be easily recognized by the hand, and there was also an abundance of *fine* râles. At that time the temperature was found to be 106° F. This was regarded as a point of interest, and gave rise to some difference of opinion regarding diagnosis; for this high temperature was such a marked variation from the general rule in the formative stage of typhoid fever, that there was an inclination upon the part of some of the visiting staff to exclude that disease. But the sequel proved that the laws of temperature in disease are laws which have exceptions, and that the observer must take cognizance of the exceptions as well as the laws. In this case, however, the early complication, capillary bronchitis, probably accounted for the high temperature.

Sept. 17.—Her temperature was 102¼° F. in the morning, and in the evening 105° F., with a morning pulse of 110 and R. 32; and in the evening P. 118, R. 36. Here was another point worthy of note, namely, increased frequency of respiration *out of proportion* to the increased frequency of pulse. From that fact it was observed we had a right to infer that there was some pulmonary affection present in the case.

Sept. 18.—Morning temperature 105° F., P. 160, R. 35; evening temperature 103¼° F., P. 112, R. 29.

Sept. 19.—Her temperature was 105° F., and R. 40.

Sept. 20.—Temperature 102½° F. morning, and 104½° F. evening; R. 46 morning, and 48 evening.

Sept. 21.—Temperature 103¾° F. morning, 104° F. evening; R. 40 morning, 42 evening.

Now it was noticed that an eruption was present upon the abdomen, having the characteristics of the typhoid, and it was seven days after the patient had taken to her bed, which made it about the classical time for the appearance of the typhoid eruption, reckoning the commencement of the disease at the time the patient takes to the bed, as is the custom with some observers. The temperature rose to 106° F. and

106¼° F., and continued high until the 27th, the day previous to death, when it fell to 105° F., and upon the day of death to 102¾° F. morning, and evening 103¾° F. The complication of capillary bronchitis in this case was regarded as *very rare*, whereas an ordinary bronchitis is almost constant.

CHANGES IN THE PUBLIC SERVICE.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from Feb. 13th to Feb. 19th, 1876.

ARMY.

HARTSUFF, A., Assistant Surgeon.—Granted leave of absence for one month, with permission to apply for an extension of five months. S. O. 17, Department of the Platte, Feb. 11, 1876.

WEISEL, D., Assistant Surgeon.—Assigned to duty as Post-Surgeon at McPherson Barracks, Atlanta, Ga. S. O. 24, Department of the South, Feb. 16, 1876.

DELANY, Alfred, Assistant Surgeon.—Died at McPherson Barracks, Atlanta, Ga., on Feb. 14, 1876.

Medical Items and News.

BELLEVUE HOSPITAL MEDICAL COLLEGE.—The Fifteenth Annual Commencement was held in the Academy of Music, on the afternoon of February 21st, at which time the degree of Doctor in Medicine was conferred by the President of the Faculty, Prof. Isaac E. Taylor, upon 159 graduates. The audience was brilliant. The music was furnished by a grand orchestra under the direction of Mr. Carl Bergmann. The Hippocratic oath was administered to the class by the Rev. Dr. Beach, Chaplain of the College.

The following prizes were awarded: to John A. Wyeth, M.D., of New York, the Wood prize of the Alumni Association, $100, for the best essay; to P. J. Higgins, the first Mott prize, $50, for the best clinical report; to Seth W. Williams, the prize for the best examination in Physiology, established by Leonard J. Gordon. Honorable mention was made of the examinations for this prize passed by J. A. Coogan, W. A. George, J. H. Jackson, G. H. Magness, H. Muhlfeld, F. A. Rice, F. R. Sherman, E. H. Tyler.

The address to the graduating class was delivered by Prof. A. B. Crosby, who laid before them in fitting words what may be accomplished by enthusiasm. Enthusiasm involves the idea of energy, work, and pluck. To work in a profession so laborious, self-sacrificing, impecunious, requires enthusiasm. The broad field of incessant scientific activity demands enthusiasm. A few well-selected text-books, if well mastered by a working enthusiasm, are far better than shelves covered with half-read volumes. Enthusiasm properly directed can never be rode to death, and if the doctor will work with enthusiasm he will find that the righteous man is not forsaken.

The valedictory address was delivered by Charles W. Cropper, of Illinois, and possessed the merit of brevity without being altogether void of wit.

DINNER OF THE ALUMNI OF THE UNIVERSITY MEDICAL COLLEGE.—The fifth annual dinner of the Alumni of the Medical Department of the University was given at Delmonico's on Thursday evening, Feb. 17th. The President of the Association, Dr. C. I. Pardee, presided. The Mayor of the city; Chancellor Crosby; D. Willis James, of the Council; Dr. Roosa, '60; Professor Markoe, of Columbia College; Professor Noyes, of Bellevue; Dr. George I. Fisher, class of '49, of Sing Sing; Dr. MacDonald, class of '70; Dr. Rush, of '76; Hon. Mr. Bailey; Dr. Wm. H. Thomson; Hon. Mr. Depew; Whitelaw Reid, Esq.; and Dr. William A. Hammond, of '48, responded to the regular toasts. The dinner was a large one, the alumni and guests filling the large room of Delmonico, and will long be remembered by those who were present as a happy assemblage.

POST-MORTEM KINDNESS.—In the course of an admirable editorial article on the above subject, in *The American Medical Weekly*, Dr. E. S. Gaillard says:

"I knew a physician who went through life with scarcely a word to cheer, encourage, and strengthen him. He was brave enough to endure in silence. He was accomplished, true, and skilful; charitable and kind; but no one ever told him so. He struggled bravely with poverty and adverse circumstances, but there was scarcely one to help him. Troubles thickened about him, but these were not told, and there were none who cared to inquire about them. He struggled always for the right, and to aid in maintaining what was just and true in his profession; but misunderstood, and his actions misinterpreted, he was frequently maligned and seldom supported. He toiled bravely on; a generous husband; a devoted father; a good neighbor; suffering from labor; worn with care; maintaining all the while his family, and adorning his profession; winning gradually a sure foothold and a reliable income. But suddenly he staggered under the load so long carried, and fell. After a brief illness he died. His brethren gathered at his funeral; they profusely decked his bier with the choicest flowers. They recorded before their profession and the public their appreciation of his talent and of his bravery. They praised his energy and devotion. They eulogized his endurance under trial, and his patience in his struggles. There was not a word of aspersion, of contumely, or of blame. Many spoke indignantly of the false charges that had been made against him, and of the unfair treatment that he had received. There was enough said and done then to have gladdened his whole life; to have blessed and made him contented and happy; to have rendered his rugged journey a living sweetness. There was enough of moral sunshine poured over that silent coffin to have made the inmate's life a bright and cloudless day. But it all came too late; the cold ear was now deaf; the once responsive eye forever closed; the heart that could have been gladdened was still; the hand could no longer feel the friendly grasp and be warmed by it. All was too late. It was the saddest of all manifestations, post-mortem kindness."

MEDICAL DEPARTMENT OF UNIVERSITY OF NEW YORK.—The Thirty-fifth Annual Commencement of this institution was held at the Academy of Music, on the evening of February 15th, at which time the Degree of Doctor of Medicine was conferred by Chancellor Crosby upon 133 graduates. Prizes were awarded to the following gentlemen: To Harry Bell Conrad, of New York, the Mott gold medal; to Alexander Dallas, of New York, the Mott silver medal; to Elbert C. Drake, of New York, the Mott bronze medal; to C. A. H. L. Von Randohn, of New York, Prof. Budd's prize, also Prof. Thomson's prize; to Wm. Howland Taylor, of Mass., Prof. Loomis's prize; to Edward Sanders, of New York, Prof. Arnold's prize, also Prof.

Roosa's prize; to Samuel Kohn, of New York, Prof. Weisse's prize; and to H. S. Norris, of New York, the prize established by Mr. James Bryce.

The Academy was filled to overflowing. The music was furnished by Grafulla. The address to the graduating class, delivered by Rev. Dr. Storrs, of Brooklyn, was brilliant and powerful, and received untiring attention. On this, our centennial year, the memory of the relation sustained by the medical profession to the nation at the time of its birth was revived, and the extent and importance of the work now before the class, as medical men and citizens, were eloquently set forth. It was maintained that the enthusiasts move the world, but that the only true enthusiasm is that which seeks truth, because it is truth; does good because it is good; and performs duty because of the love of duty. In this there is manifested an affection, and in the affection is the unfailing reward. Dr. George W. Chandler, a member of the graduating class, delivered the valedictory address, which was favorably received.

Army Medical Staff Rank.—The following is the memorial to be presented by the Committee of the American Medical Association.

To the Honorable Senate and House of Representatives of the United States, in Congress assembled:

The undersigned, a committee of the American Medical Association, respectfully represent that the existing laws do not, in the opinion of the association, accord to the medical corps of the army equality in rank with the other staff corps, or with the medical corps of the navy. The committee believe that the members of the medical profession throughout the United States share in this opinion, and that they earnestly desire that an increase in rank and pay be given to the medical officers of the army. A petition to this effect was presented to your honorable body during the last session of Congress. A report of the committee charged with that service was made to the American Medical Association at its meeting in Louisville in May last, and is herewith submitted. In accordance with the resolutions therewith adopted, the undersigned members of the committee, and in behalf of the medical profession of the United States, do earnestly entreat Congress to redress the grievances of the medical corps of the army, and to put it upon a permanent basis of respectability and usefulness. They beg leave to represent that this can only be done by providing that the officers of this corps shall hereafter receive a certain increase in rank in accordance with length of service.

And your petitioners will ever pray.

H. A. Johnson,
Chairman of the Committee.

The Ulster Overcoat is spoken of by the *Sanitary Record* (London) as "the *ne plus ultra* of convenience and comfort." It further says, and very correctly too, we think, "Its length, if not its style, should be adopted in all overcoats, which should reach to at least three or four inches below the knee for adequate protection against cold." This style of garment is quite popular with the medical profession, not only here, but everywhere else.

Health Physician of Knoxville.—Through the efforts of the Knox County Medical Society the aldermen of Knoxville have rescinded their former action abolishing the office of city physician for Knoxville, and have increased the salary of that gentleman. This is a good example for other societies in protecting the rights of their members, and using their influence against political trickery.

The Right of Druggists to Prescribe.—An action has recently been brought by the Apothecaries' Company against a chemist and druggist of High Street, Shadwell, to recover a penalty of £20, under the provisions of the Apothecaries' Act, for alleged infringement of that act, by practising as an apothecary without having obtained the necessary certificate from the company. The jury returned a verdict for the plaintiff. In Great Britain, at least, illegitimate counter-prescribing has received its death-blow.

The Title of Doctor of Medicine and the London College of Physicians.—A committee appointed to consider resolutions bearing upon the above, recently adopted the following: "That no fellow, member, or licentiate of the college is authorized or entitled, by virtue of any diploma or license of the college, to append to his name the title of Doctor of Medicine, or the initial letters M.D., or any other letters indicating that he is a graduate in medicine of a university, unless he has obtained a Degree in Medicine from a university legally entitled to confer such a degree, and which is recognized by the college." This will apparently end a long controversy on the subject.

Doctors and Newspapers.—Dr. A. G. Field, of Des Moines, Iowa, publishes an article with the above caption, in which he advocates the expediency of newspaper advertising. Some of our New York brethren are so well versed in this business that they can give Dr. Field a great many useful hints.

Royal College of Surgeons, Ireland.—It is intended to enlarge the museum and library of the Royal College of Surgeons, Ireland, at a cost of £5,000.

"Peculiar People."—Another of this religious sect has been indicted in England for refusing to call in aid, and thus probably preventing a death from whooping-cough. Our British cousins are certainly very practical people.

The Medical Society of District of Columbia has completed its second volume of transactions. It is made up for the most part of the reports of the stated meetings by the Secretary.

Acute Bronchocele in Pregnancy.—Dr. John B. Roberts, of Pennsylvania Hospital, Philadelphia, asks for accounts of cases of the above, attended with grave attacks of dyspnœa.

County Main Sewers in Aid of the Drainage of Villages and Small Towns.—Dr. A. O. Bayles contributes a very practical article on the above subject in the London *Sanitary Record*, January 15.

Scarlet Fever.—A gentleman of London has recently been fined for conveying his daughter, while suffering from scarlet fever, to an hospital in a public cab.

Weekly Bulletin of Medical Societies.

Monday, Feb. 28.—Medical Society of County of New York. Discussion of Dr. Otis's paper.

Tuesday, Feb. 29.—Alumni dinner of College of Physicians and Surgeons—(Sieghortner's, 32 Lafayette Place, 6 P.M.).

Wednesday, March 1.—Commencement of College of Physicians and Surgeons.

Thursday, March 2.—New York Academy of Medicine.

Friday, March 3.—N. Y. Medical Library Association. Dr. Beverley Robinson's report on Diseases of the Throat.

Original Communications.

DIPHTHERIA.

CONDENSED FROM LECTURES DELIVERED IN JEFFERSON MEDICAL COLLEGE, ON MAY 13TH, 17TH, 20TH, AND 24TH, 1875.

By J. SOLIS COHEN, M.D.,

LECTURER ON LARYNGOSCOPY AND DISEASES OF THE THROAT AND CHEST.

TREATMENT.

III.

If diphtheria is primarily or essentially a constitutional affection, its development, when once it has fairly attacked the organism, can no more be prevented than can the development of the contagious exanthemata, typhoid fever, and other specific diseases of like character. Seclusion from infection appears to be the only reliable means of prophylaxis. If removal from infected centres is impracticable, we must be content with advising avoidance of exposure to cold, inhalation of dust and other deleterious matters in the atmosphere, over-exercise of the voice, and everything whatever which may predispose to inflammation or catarrh of the nares, throat, and air-passages. At the same time care must be taken to keep the general system in its healthiest condition; and if there is occasion for the use of tonics, the tincture of the chloride of iron may be administered with great propriety.

Upon the appearance of any morbid secretions in the throat or nostrils, frequent and efficient cleansing should be instituted with washes, douches, or gargles of weak solutions of table salt or chlorate of potassium; and if there is direct exposure to infection, carbolic acid, salicylic acid, sulphurous acid, permanganate of potassium, the hyposulphites, and the like, may be judiciously substituted on account of their antagonistic action upon the development or propagation of low organisms.

The treatment to be instituted, once the pathological products have become manifest, will depend upon the views held as to the nature of the disease and its cause. Nutritive, supporting and stimulating treatment constitutionally, is now almost universally recognized as absolutely necessary; and depleting measures, even of the mildest character, are almost universally avoided. This unanimity would indicate that diphtheria is something more than the pseudo-membranous croup, which, if we credit the records in our textbooks, was formerly thought to require the use of antiphlogistic measures.

With regard to the treatment of the local manifestations, there is much less unanimity of opinion. Practitioners who regard diphtheria as chiefly a systemic disease are apt to consider local measures as useless and productive of fresh sources of injury. They will depend on systemic medication to the exclusion of specific or special local measures, unless we look upon the exhibition of emetics, expectorants, and the like, for the expulsion of accumulations in the air-passages, as local measures. Many eminent practitioners discard all local treatment whatever. Practitioners who believe the disease to be chiefly local in the first instance, will direct their efforts towards removal or destruction of the morbid products, and, if too late to accomplish this result, to the exhibition of local agents that dissolve or decompose them. Those who partake of both views will pursue a mixed treatment accordingly.

Although numbers of observers denounce topical treatment on the score of its uselessness in a systemic disease, its inefficiency to prevent subsequent deposits in the same locality, its liability to induce additional deposit upon surfaces which may be accidentally or unintentionally exposed to contact with the local remedy, the difficulty of its effectual application in certain instances, and the like, evidences of the efficacy of local interference have been too numerous to justify entire reprobation of the practice. Employed by Aretæus, centuries ago, and then reintroduced into practice by Van Swieten, and again by Bretonneau, it has been abandoned and resumed again and again. Some observers resort to the local action of caustic applications, with the view of arresting the extension of the membrane over unaffected structures, or effecting its entire destruction,—and chiefly on the theory that the main danger lies in the deposit; others hope to excite a substitutive healthy inflammation of the part which shall supersede the unhealthy specific process; others, again, hope to destroy the cryptogamia which are believed to be the initial cause of the deposit; and others hope to place the mucous membrane in a condition unfavorable for the propagation of these organisms.

As diphtheria is always serious, every case demands close attention, and frequent and careful examination, with the aid of all the resources at our disposal; and the treatment, to be at all effectual in hazardous cases, must be assiduous and free from vacillation. Topical applications, when resorted to, should be made by the medical attendant himself, or by a professional assistant fully competent, no matter how frequently they need to be repeated; and other local measures should be instituted under the personal superintendance of a well-instructed attendant. Many a patient is sacrificed to inefficient attention, a neglect that is only excusable in the country practitioner whose patients reside at distances so remote that it is impossible to secure them a proper amount of professional surveillance, and which is actually culpable when there are other physicians whose assistance can be enlisted if the regular adviser is unable by press of business to devote sufficient personal attention to his own patients.

Several objects must be kept prominently in view during the entire treatment. Chief among these is efficient sustenance of the patient, and the prompt discharge of the morbid products as they accumulate. If these two main indications can be fulfilled the patient can be carried safely through the disease. There is no specific, topical or constitutional, which can arrest the disease or prevent the evolution of the local manifestations, although there are agents which modify the process and diminish the virulence of the infection. A warm, equable temperature, an excess of humidity of the atmosphere, and free ventilation conduce to the comfort of the patient, and the facilitation of expectoration. Until the appearance of the exudation we may depend upon nutritive and tonic treatment, with thorough cleansing of mouth, throat, and nares; care being taken to disinfect the apartment and the house as far as practicable. This disinfection may be accomplished to some extent by the free use of solutions of carbolic acid exposed here and there, or sprayed about from time to time, and of sulphurous acid in spray, or in fumes from ignited sulphur; these agents being competent, in some instances, to destroy the germs which spread the infection, if they do not originate it.

Tincture of the chloride of iron is one of the most

valued remedies for internal administration. It is usually given in decided doses frequently repeated; from five to fifteen or twenty drops, according to the age and vigor of the patient, every second hour, hour, or half-hour. It is necessary to secure its action upon the blood and system as rapidly as possible. Its frequent deglutition likewise exerts a beneficial physical influence upon the morbid products with which it comes in contact; for, as will presently be stated, it is one of our most reliable agents for topical medication. I have no hesitation in commending the use of this remedy.

Quinia is much used as a tonic in diphtheria, as well as for its action upon the nervous system, and as an apyretic in fever. It may be combined with the tincture of iron in the form of the hydrochlorate, or, if that is not accessible, in the usual form of sulphate. It is given in decided doses until the buzzing in the ears or some other manifestation gives token that the system is under its influence, when the doses may be lessened and the intervals between them increased. I am not much in the habit of prescribing quinia in diphtheria, unless I see some special indication for its exhibition; but this practice is by no means to be construed into any absolute disparagement of its remedial agency.

Alcohol, in the form of some strong wine or brandy, is of great value as a stimulant. From half a drachm to half an ounce of brandy, or its substitute, according to the age of the patient, may be given every two or three hours, or more frequently; and its free administration should not be delayed after the earliest symptoms of loss of vigor are apparent. Its effect on the general condition of the patient will be the criterion for its continuance. When indicated and well borne it may be used freely, especially if efficient nourishment is difficult.

Carbonate of ammonium is a remedy of great value at special moments of sinking. A full dose at such periods will sometimes stimulate the patient during a short interval, which may be taken advantage of for the administration of the remedies in systematic use, or of emetics, or inhalations of lime, and the like, to facilitate the expulsion of accumulating secretions in the air-passages.

Chlorate of potassium is extensively used as an internal remedy, frequently in the form of chlorine mixture, which contains an equal number of grains of the salt and of drops of muriatic acid in simple or aromatic water, infusion of quassia, and the like, with the addition of some syrup if desirable. It is also given in the form of lozenges, containing a grain or more of the salt each, administered as frequently as may be necessary to introduce the desired quantity of the chlorate, usually from thirty grains to a drachm or so in the twenty-four hours. Though rarely prescribing chlorate of potassium with confidence, the lozenge is the mode of administration that I usually prefer, because the remedy is retained longer in contact with the affected parts, and thus has a better chance to exert a beneficial influence locally. I must remark, however, that I have rarely seen, even in slight cases, the remarkable results from this remedy which have followed its exhibition in the practice of many others; and though acknowledging its occasional usefulness, I am inclined to doubt its efficacy as a reliable remedy against the disease or against its local manifestation. Furthermore, its inordinate use may irritate the kidneys, a result to be avoided in view of the significance of albuminuria as an unfavorable manifestation.

Calomel, first employed in croupous affections by the illustrious Dr. Rush, of this city, is extensively used as an internal remedy to modify the condition of the blood and to prevent further exudation; some practitioners believing that the disposition to exudation is arrested as soon as the system is under the influence of the mercurial. It is given early in the disease, before the strength of the patient has become too much impaired, in doses of from one to three grains every second hour, hour, or half-hour, until there is evidence of its constitutional effect in the characteristic stools, or upon the gums, when it is discontinued or repeated at longer intervals as circumstances may dictate. Bretonneau and others have reported successful results from this treatment, even after the larynx and trachea had become implicated. Mercurial inunctions, a drachm of the usual ointment every hour, are sometimes employed in addition, to hasten the desired result. In infantile cases, with prominent cerebral symptoms, boring of the head into the pillow, and the like, I have seen excellent results from the internal use of calomel; but I would not recommend its employment otherwise, except at an early period, and in a vigorous subject, and would abandon it after a few doses, if there were no decided evidence of its usefulness.

Bretonneau felt induced to believe * that the action of calomel in modifying the pellicular inflammation was due to its insinuation into the larynx; and Jodin attributed much of the good effects of the internal administration of both calomel and chlorate of potassium to their mechanical action in passing over the deposits.

The alkaline carbonates of potassium and sodium, and the acetate of potassium, have been recommended for their influence on the disposition to exudation, and they are often exhibited in association with calomel. Large doses are said to be necessary; from fifteen grains to a drachm in the twenty-four hours to infants, and from one to three drachms daily to adults. I have no experience in their use in diphtheria.

Copaiba and cubeb have been highly recommended by Trideau, especially in the first and second stages of the affection. To adults he administers a dessert-spoonful of the syrup of copaiba every second hour, followed in the intermediate hours by fifteen grains of powdered cubeb in a tablespoonful of syrup. For children the dose is about one-half of this amount. These remedies are administered on the principle of their property in drying up sources of mucous secretions. Cubeb, more particularly, has received the commendation of many observers who have followed Trideau in its use. It is supposed that the elimination of these remedies by the respiratory tract enables them to exert a special topical influence on the bronchial mucous membrane.

The hyposulphite of soda, recommended by Dr. Tubbs, of Upwell, is sometimes used internally, in the hope that in its decomposition the system may be favorably subjected to the influence of sulphurous acid upon low organisms. It is administered in doses of from one to three grains to children, and from eight to ten grains to adults, repeated every three or four hours.

On similar grounds carbolic acid and salicylic acid have been given in diphtheria with asserted benefit. I have no experience to offer in this connection, but should not anticipate much from the internal use of antiseptics from quinine, through the list, to salicylic acid, as much larger amounts would be required to disinfect the mass of the tissues than it would be convenient or safe to administer.

Bromine has been used internally with much asserted

* Op. cit., 4th Memoir, p. 163.

success.* As will be mentioned later, it is a valuable remedy by inhalation. I have no experience with its internal administration. The dose is a drop or two of a solution, one grain to the ounce, given in sweetened water, and repeated every hour or so.

Iodine and many other remedies have been extolled for their constitutional influence on the disease, but it is hardly worth while to enter into their consideration, as they are not in frequent use.

Swollen and tender glands externally have been mentioned as frequent accompaniments of the earlier symptoms. Warm applications of cotton wadding, spongio-piline, or even actual cataplasms are frequently used to relieve suffering; and some cases are treated by mild inunctions with some innocuous ointment or grease, as lard, cold cream, olive oil, and the like. Care must be taken not to employ agents which may abrade the skin, on account of the danger of cutaneous infection, with its unfavorable effects. Some practitioners employ cold compresses, and even ice externally, but the practice is by no means devoid of injurious consequences, though often resorted to with impunity. If not promptly beneficial their use should be discontinued. Ice to the interior of the inflamed throat, on the contrary, is often a grateful and beneficial application, though condemned by some authors. I have always allowed my patients to take all the ice they craved, and have encouraged the frequent use of iced-water, water-ice, and ice-cream in small quantities at a time; and my impression is that the use of pellets of ice, allowed to dissolve in the mouth, is steadily gaining in favor.

We now come to consider the treatment in reference to the exudation itself.

The use of emetics is indicated, in children, if there be evidence of accumulation of secretions in the air-passages, in order to provoke their expectoration by the act of vomiting. The action of an emetic is to induce diaphoresis of the skin from the vascular relaxation which accompanies the act, and something of the same kind may be supposed to take place in the bronchial mucous membrane, thus facilitating the detachment of viscid or adherent secretions. The air-passages of infants are very tolerant of mucous accumulations, and therefore this point needs attention. It is an important matter to encourage cough, or to provoke it if necessary, whenever morbid products are accumulating in the air-passages. Adults are able to expectorate voluntarily, and the same indication for the emetic does not present. Alum, soon to be mentioned as one of the suitable local agents, is an excellent emetic in mild cases, and is unattended with the objectionable after-effects which sometimes follow the use of ipecacuanha, tartar-emetic, sulphate of copper, and the yellow sulphate of mercury, the four emetics in most use for the purpose. The recognition of the value of alum is due to the late Dr. Meigs, for many years Professor of Obstetrics in this college. It is administered in doses of a teaspoonful in an equal quantity of honey or molasses, and repeated in ten or fifteen minutes if the first dose is ineffectual. Should three or four doses fail to produce emesis, the other articles just mentioned may be substituted in proper doses. Considerable circumspection is requisite in the use of the tartar-emetic on account of its depressing effects. The hydrochlorate of apomorphia, a new remedy, has recently acquired great reputation as an emetic, on account of the promptness and certainty of its action and the almost entire absence of after-effects. It is usually administered by hypodermic injection, in doses of from one-thirtieth to one-tenth of a grain, and its effects are produced in a very few minutes. I have had no experience as yet with this agent, but mention it favorably on the authority of several reliable observers. Titillation of the base of the tongue is said to be sometimes effectual in inducing emesis in these instances. The emetic should be repeated at intervals of six or four hours, more or less, according to the indications. Emesis is by no means always requisite, nor should it be pushed too far.

Expectorants acting through the system are rarely of much use in diphtheria. The action of senega in rendering the exudation more fluid, and facilitating expectoration, is insisted on by Bretonneau,* and he was led to associate it, in doses of a few grains, with the calomel treatment, in cases where dryness of the mucous surfaces appeared to have been the principle obstacle to the expulsion of the false membranes. In case an expectorant is indicated, I think senega the most reliable agent that you can employ. Sanguinaria is used with considerable success by a number of practitioners in this city. A little carbonate of ammonium added to the senega is sometimes of advantage. I have seen chloride of ammonium answer a good purpose in some instances.

(To be continued.)

THE ELECTROLYTIC TREATMENT OF MALIGNANT TUMORS.

By WM. B. NEFTEL, M.D.,

NEW YORK.

My first case of a true cancer cured by electrolysis, which, as I can now add, has never been followed by a relapse, was published in this journal in 1869. Since then I have continued to study the clinical history and the histological nature of morbid growths and their electrolytic treatment, and published my researches in the fifty-seventh volume of Virchow's Archives, whence they have been reprinted in the leading medical journals of Germany, France, England, Italy, etc. At that time my principal object was merely to demonstrate that even the most malignant tumors (carcinoma, sarcoma, etc.) can be cured by electrolysis. I have since modified and improved the methods, the detailed description of which will appear in an English edition I am now preparing for publication. It seems to me, however, that without further delay I owe a brief reply to the inquiries of some of the numerous readers of THE MEDICAL RECORD, in the columns of which appeared my first preliminary notice upon the subject.

The final result of my researches can thus be summed up: "*The most malignant tumors (cancers, etc.), at a certain stage of their development can be radically cured by electrolysis employed according to certain methods.*"

As an illustration I mention three cases selected from a number of similar ones.

Mrs. H., wife of an experienced physician, forty three years old, married twenty years, and mother of three children, was formerly healthy, with the exception of dysmenorrhœa she had suffered from when a girl. After the birth of her first child she had an inflammatory swelling of the right mammary gland (puerperal mastitis), which, however, got well spontaneously. In April, 1869, she received a blow in the same breast, but the pain soon disappeared, and she thought no more of it until August, when she commenced feeling pain

* Ozanam, Comptes rendu de l'Acad. de Sci., 1856, p. 102.

* Op. cit., p. 165.

and discovered a hard lump that continued to grow slowly, and became adherent to the skin. The pain assumed a lancinating character and extended over the right arm.

I found the patient very much emaciated, anæmic, and cachectic-looking. The tumor was of the size of an orange, and adherent, the nipple was retracted, and the axillary glands somewhat indurated. The brother of the patient died from an epithelial cancer of the lower eyelid.

April 19, 1871, I performed the first electrolytic operation, with the assistance of Dr. Whitehead (formerly of New York, now of Denver), and of Dr. Harwell, the husband of the patient (of Waymanville, Upson County, Georgia). No fever or any other morbid reaction followed the operation; on the contrary, the general health of the patient commenced to improve very rapidly, and soon the appetite, sleep, and complexion became normal.

In the presence of the same physicians, April 28, May 2, and 6, I repeated the electrolytic operation, followed by the usual after-treatment described by me in Virchow's Archives. The tumor gradually diminished, then entirely disappeared, leaving no trace, and the patient returned home in an excellent condition of health. The patient and her husband have several times written to me that no relapse has taken place, that her general health continues to be excellent, and that she has gained flesh.

In his last letter, dated Jan. 1, 1876 (Waymanville, Georgia), Dr. Harwell writes to me: "I am happy to inform you that my wife is still living, in good health, and, I trust, permanently cured of the cancer that was so fast terminating her earthly pilgrimage. It will soon be five years since she was under your treatment, and as yet there is no symptom of a relapse."

The following case presents several points of interest besides the cure of the tumor.

Miss ——, about forty-three years old, of high social position, came under my care, Nov. 10, 1874, affected with scirrhus of the right breast and induration of the axillary glands. Her father died of a cancerous tumor on the neck, and her brother of consumption.

She suffered for a number of years from a most aggravated kind of dyspepsia, which allowed her to use only a few articles of food, and these in the smallest possible quantity. The slightest increase of, or variation in, the diet would cause such an amount of distress and suffering that the patient decided to undergo a slow process of starvation, as the only means of rendering life bearable. She arrived at this decision after having in vain tried all methods of treatment, and received the verdict of one of the most prominent physicians that her dyspepsia was incurable. A year and a half ago she noticed in the right breast a small nodule, which was slowly increasing in size, and for the removal of which she put herself under my care. I found the patient very much emaciated, in the right mammary gland one large nodule of irregular shape and of the size of a walnut, and, besides, several smaller ones; the axillary glands much enlarged and indurated. The patient kept in secrecy even from her nearest relations the existence of her tumor, and told me that she was prepared, if necessary, to suffer any amount of pain, provided the operation could be performed without the presence of any one. She would also take no anæsthetic, the effects of which she much dreaded.

Dec. 16, I performed the first operation by the improved method, which, however, I had to modify in accordance with the exceptional conditions and peculiarities of the case. The pain from the insertion of the needles was avoided by local anæsthesia, while Siemen's rheostate afforded the means of increasing gradually and slowly the current-intensity in a perfectly painless manner. One who has not witnessed such an operation can hardly imagine how the necrotic destruction of the tumor can be effected by a strong galvanic current without causing the slightest pain. The patient herself assisted me during the entirely painless operation, holding the inserted needles, etc., and after the operation walked home feeling quite comfortable. No febrile or any other reaction followed the operation, which I repeated in the same way three times, at intervals of several days, until the nodules disappeared, after which the usual after-treatment was commenced.

The most striking effect of the treatment was produced upon the dyspeptic symptoms, which have entirely disappeared, and the patient has not felt so well for many years. Her general health continues to be excellent, she has no dyspepsia, and is able to eat all kinds of food in the necessary quantity without any inconvenience.

She says she would have gladly undergone the same operation merely for the cure of her dyspepsia, were she not obliged to submit to it for the dispersion of the tumor.

Mrs. E., an intelligent and cultivated lady, about forty-nine, still menstruating, though irregularly, has borne six children, only two of whom are living. Her grandmother and three of her grandmother's sisters died of mammary cancers, her mother is supposed to have died of pulmonary consumption at the age of sixty-four, but as she also had a tumor in the hypogastric region, and a tumor or tumors in the abdominal cavity, it seems more plausible to assume that the alleged consumption was nothing but a secondary cancerous affection of the lungs. The patient was always in good health, except that in the winter of 1874 she occasionally felt a slight pain in the left breast, to which, however, she paid no attention, until in May, 1875, when she accidentally discovered in the breast a small lump, the size of a hickory nut, which grew so rapidly that in the course of two months it attained the size of a child's head. Her family physicians, Drs. Jones and Graham, of Charlotte, N. C., gentlemen of experience and high standing in the profession, declared the tumor to be a carcinoma of the most malignant kind; and as the axillary glands were already affected, and a surgical operation offered no hope of success, they advised the patient to go at once to New York and put herself under my care for electrolytic treatment.

I examined the patient July 17, 1875. She presented a somewhat cachectic appearance, but was otherwise healthy. The whole left mammary gland was transformed, or rather degenerated, into a large tumor, the size of an infant's head, irregular in shape and consistency. The tumor was adherent to the skin and subjacent tissues, the nipple indurated and retracted. In the axilla another tumor could be felt, the size of a hen's egg, and composed of a conglomeration of indurated and enlarged glands. The subcutaneous veins over the tumor were dilated. I could only corroborate Drs. Jones and Graham's diagnosis, and was very reluctant to undertake the case, as, according to the rules laid down by myself, the electrolytic treatment of malignant tumors is successful only as long as there are no deposits in internal organs; in other words, as long as the disease remains local. Taking into consideration the exceedingly rapid growth of the tumor (it was daily increasing under my observation), and

the affection of the axillary glands, the generalization of the disease seemed certain, and the treatment presented no hope of complete success. However, as a surgical operation was out of the question, and nothing else could save the patient, I resorted to the electrolytic treatment by my new method. I performed three electrolytic operations under the influence of an anæsthetic, and with the assistance of Drs. Castle, Hartt, and Robie, followed by the usual after-treatment, which, however, I had to modify, as will soon be described. The large tumor as well as the axillary tumor have entirely disappeared, the general health of the patient became excellent, and continues to be so, as she informs me in her last letter of Feb. 21, 1876: "I am getting on splendidly, have no pain at all, eat well, and sleep well, for all of which," etc., etc.

I select these three cases as belonging to different periods, since the introduction by me of the electrolytic treatment of malignant tumors. Though all undoubtedly malignant (cancerous), they differ, however, in the rapidity of their development and in the methods of treatment, the detailed account of which will be published in a separate monograph.

In conclusion, I may add that the electrolytic operations performed by me have never been followed by pyæmia, erysipelas, or any other accidental diseases, which so often complicate surgical operations. On the contrary, the general health of the patients commenced to improve rapidly, and they were not prevented by the treatment from pursuing their occupations and their social or household duties.

THE YELLOW OXIDE OF MERCURY IN PHLYCTENULAR KERATITIS.

By PETER A. CALLAN, M.D.,

NEW YORK CITY.

This form of corneal inflammation is essentially asthenic in character, following the exanthemata or any exhaustive disease, and often engendered by neglect of hygienic laws. Arlt denominates the disease scrofulosa, on account of its frequency amongst scrofulous subjects.

It is almost exclusively confined to subjects under fifteen years of age, and furnishes about four-fifths of all the eye cases amongst the children frequenting our eye hospitals and infirmaries.

Every practitioner has seen such cases, in which small vesicles or phlyctenules develop on the cornea proper or its limbus, almost heal, when fresh ones make their appearance; the former marking their course by whitish opacities or superficial ulcers very slow to heal, and accompanied by more or less intolerance of light. The *photophobia bears no relationship to the severity of the case*. The inflammation runs a course of weeks, usually months, getting nearly well, then relapsing; this repeats itself many times, finally wearing out the patience of both doctors and parents.

In the treatment of this form of keratitis, it is a *sine qua non* that the health of the patients be attended to, seeing that the little ones are not kept in dark or badly ventilated rooms, and when practicable sent into the fresh air, regulating diet, etc. It is only in this way, and in conjunction with the local treatment, that relapses can be prevented and the disease permanently cured.

In eye therapeutics the use of red and yellow oxide of mercury is nothing new. Twenty years ago Mackenzie recommended a powder of the former with sugar—one part to eight—to be blown on the eye for opacities of the cornea. Ten years ago Pagenstecher, of Wiesbaden, introduced a salve of the same proportions, using the yellow instead of the red oxide.

We have found the yellow oxide of mercury, mixed with the glycerinate of starch, one to six, or even one to four parts, in our hands prove a specific in phlyct. keratitis. The yellow is preferable to the red, on account of its not irritating so much, and lard is inferior to the glycerinate of starch as a vehicle.

In using the yellow oxide of mercury in such large proportions, certain advantages are to be derived over the ordinary methods of treatment, viz.: certainty of cure, great reduction of the percentages of relapsing cases, alleviation and disappearance of the intolerance of light, without the use of uncertain medication or surgical interference.

In using the ointment a quantity not exceeding half a pea should be put in at one time. The lids should be closed, and the eyeball gently rubbed so as to make the salve be distributed equally over the surfaces of cornea and conjunctiva. Omitting this it gravitates into the lower cul de sac, and in a small percentage of cases may cause a slight superficial abrasion. This abrasion quickly heals, however, if the treatment be omitted for one or two days. In the accompanying cases the treatment was not oftener than three times per week unless specified, and, as usual with such a class, not so frequently, the patients not being regular in attendance. In all cases that it is practicable, the application should *be made daily*, and, if possible, after the first few times intrusted to the parents, with appropriate instructions. It is well to continue treatment for two or three weeks after the apparent cure of the disease.

With regard to the use of s. atropia and hot fomentations, they may be necessary in the earlier stages of the inflammation, but in the later stages they are not imperative, particularly the hot water, which tends to produce a passive congestion, and retards rather than assists the disappearance of this asthenic disease.

We have used with unfailing success the yellow oxide in phlyct. keratitis during the last two years, and often in chronic cases of interstitial and vascular keratitis. Employed to remove chronic opacities of cornea, it will very frequently prove too irritating, causing slight conjunctival abrasions.

Dr. W. T. Bacon has given the yellow oxide of mercury in the proportions suggested a thorough trial at the New York Eye and Ear Infirmary, and has furnished me with the notes of some twenty odd cases, from which the following are averages of the whole number:

Mary W., æt. 8. Had keratitis for last year; first in right, then in left eye. Improved under treatment, but never well. Both eyes have opacities on cornea; one phlyct. on left cornea, two on cornea of right; considerable intolerance of light. Oct. 27, began treatment with salve of yellow oxide. Nov. 3, condition very much improved. Nov. 11, slight opacities mark the position of recent phlyct., and all injection cleared up. Intolerance of light entirely gone. Patient treated and kept under observation until Dec. 1st; discharged.

Wm. H., æt. 18 months. Since last May has had keratitis phlyct. of left eye. About August right eye began to have same trouble. Eyes irritable, cornea hazy; phlyctenula on cornea of right almost over pupil; left has a vesicle on limbus cornea, outer side. Much conjunctival injection of both eyes, with marked intolerance of light. Oct. 18, began use of yellow oxide, omitting all other treatment. Oct. 25, phlyc-to-

phobia has disappeared; all injection of conjunctiva removed. Haziness of cornea cleared up. Opacities remaining, and patient to be kept under treatment for some time longer.

Josie C., æt. 5. Last August first attack in left eye. A phlyctenula on lower and inner portion of limbus cornea, with band of conjunctival vessels running towards it. Intolerance of light moderate in degree. Oct. 18, began use of ointment. Nov. 3, marked improvement; no photophobia; phlyctenula almost healed. Patient failed to return until Nov. 12, when he was brought back with a relapse, great congestion of eyeball, and light very painful to the eye. Renewed the treatment. Nov. 15, saw patient; symptoms greatly alleviated. Nov. 19, cured.

Dan. K., æt. 4. Right eye affected since Sept. 30. Oct. 25, small ulcer of cornea, inner side, midway between pupil and limbus; very slow in healing. Used ointment for first time. Oct. 27, slight abrasion at cul-de-sac as a result of the application. Omitted yellow oxide, and touched the abraded surface with a 5 gr. sol. of nit. argenti. Nov. 1, ulcer has filled up and almost well. Patient failed to return.

Maggie O'N., æt. 9. Has been suffering with left eye since spring; eye would be almost well at times, and in a few days bad again. Large superficial ulcer on limbus cornea, lower and inner portion. Eyeball very much injected—*very little* intolerance of light. Oct. 20, began use of ointment, omitting all other medication. Oct. 27, injection nearly gone; no intolerance of light. Nov. 5, ulcer healed, leaving an opaque spot; no injection; treatment to be continued.

Mary R., æt. 15. Three years ago, first attack in left eye, following an operation for the destruction of the lachrymal canal of same side. Present attack dates back to Feb. 15, 1875. During all the intervening time the eye has never been well. Has but a slight amount of injection in the lower portion of the globe; not very marked photophobia. Has a phlyctenula on lower third of cornea. Oct. 1, has been intrusted with some of the ointment to use every day at home, with order to report at the expiration of a week. Returned cured. To continue for some time the treatment. In this case the constant flooding of the eye by tears is an active cause in keeping up the disease.

No. 29 W. 31st Street.

A CASE OF LEFT HEMIPLEGIA WITH APHASIA.

By S. HEMINGWAY, M.D.,

late resident physician epileptic and paralytic hospital.

The following is the history of a patient admitted to the Epileptic and Paralytic Hospital in the division to which Dr. E. G. Janeway was the Visiting Physician, and was seen by him on many occasions during the patient's stay in the institution.

The great rarity of lesion on the right side of the brain, associated with aphasia, is the reason why this history is presented.

Jane R., æt. 30, widow; occupation, seamstress; education fair, can read and write. Entered hospital Oct. 30, 1873. Family history good; says she always was a healthy woman till present illness. Admits having had a sore on genitals five years ago. Cicatrices are at present visible on forehead, which are probably a result of tubercular syphilide; says they came there five years ago. Her left eye shows the result of an old ophthalmia, which, it is supposed, was of gonorrhœal origin.

For two years past has had slight palpitation on exertion. Always used her right hand in her occupations.

Four months ago, one night when she was going to bed, she became suddenly speechless; there was no paralysis whatever. Next morning, on attempting to arise, found her left arm, leg, and side of face paralyzed, also with loss of sensation in those parts. Loss of speech was complete; and hearing, which before this was excellent, was now lost in left ear. Her tongue was only affected in sensation. She was not able to appreciate sweet substances placed on tongue. Sense of smell also lost. About one month after this attack, *i.e.*, three months ago, improvement began in speech, face, and lower extremity, and has continued since then. Upper extremity began to improve one month ago. Sphincters have not been affected.

Is a medium-sized woman, pretty well nourished. Mental faculties good, with exception of loss of memory, constituting well-marked amnesic aphasia. Is unable to recollect many words, names of objects, as hat, key, handkerchief, pencil, etc.; though she can readily repeat them on being told, she forgets them immediately afterwards. Is unable to read continuously, omitting words and giving up from inability to fix attention. On attempting to write the letters of the alphabet the result was A, B, C, D, D, S, G, H, I, but when the letters were told off to her she wrote them down easily. Partial paralysis remains on left side of face; cannot close eyelids tightly. Sensation is lost to a great extent in left side of face and in left nostril. Does not wince on the application of aqua ammonia to left nostril, nor does she wince when the conjunctiva on same side is touched with an irritant. Hearing poor on left side. Taste is impaired anteriorly and posteriorly on left side of tongue.

Dynamometer { left, 32 / right, 80 } outside circle.

Æsthesiometer is valueless on account of loss of sensation of reaction to pain. Does not wince on pinching arm, but does on palm of hand and tips of fingers. Perception delayed; takes about three seconds. Can raise arm to level of shoulder; a little stiff. Can flex and extend forearm and fingers, but slowly. Heart sounds normal. Walks without elasticity. Sensation in leg as in arm. Reflex action lessened. Electro-muscular contractility good.

Feb. 27th, 1874. Aphasia almost entirely disappeared. A little slowness in speaking.

Dynamometer { left, 60 / right, 80 } outside circle.

Sensation recovered in face, etc. Taste and smell all right again. Walks about as well as ever.

Treatment—Iodide of potassium internally, and applications of faradic current.

The Juniata Valley (Penn.) Medical Association is the title of a new organization, which held its first meeting in Huntingdon, Pa., Feb. 4, 1876. The following officers were elected: *President*, Dr. Roan Clark. *Vice-Presidents*, Dr. John B. Ross, of Blair, and Dr. D. P. Miller, of Huntingdon; Dr. J. I. Marks of Mifflin; Dr. D. M. Crawford, of Juniata; Dr. O. H. Orris, of Perry. *Recording Secretary*, Dr. A. B. Brumbaugh. *Corresponding Secretary*, Dr. A. Rothrock. *Treasurer*, Dr. W. M. Finley.

The next meeting will be held in Lloydsville, Blair Co., Pa., July 7, 1876.

Progress of Medical Science.

On the Connection of Epithelioma of the Tongue with Psoriasis of that Organ.—M. Trélat recently read an interesting paper on this subject before the *Société de Chirurgie*. He reported three cases, of which the first was a well-marked one of epithelioma which had been preceded by a very small patch of psoriasis. Surgical intervention proved useless, and the patient succumbed to the usual accidents of cancer of the tongue. The second tumor had started from a smoker's patch, which had existed a long time. The tumor was removed by the galvano-cautery, and microscopical examination showed the typical structure of epithelioma. In the third case, a tumor, divided into two lobes by a deep groove, corresponding to the median septum of the tongue, had developed from an old and rebellious patch of psoriasis. Although the usual signs of epithelioma, both functional and rational, were wanting, the tumor was removed by the galvano-cautery. Microscopical examination showed it to consist of the mucous membrane greatly thickened and traversed by bands of young epithelial cells, but there were no epithelial nests and no hypertrophied papillæ. Notwithstanding the absence of the ordinary signs of an epithelioma, and the almost negative results of the microscopical examination, M. Trélat considered the tumor an epithelioma in the earlier stages of evolution. Was the connection of psoriasis and epithelioma in these three cases simply a coincidence, or did the psoriasis become transformed into an epithelioma? The observations were still too limited in number to base a theory upon them, but M. Trélat believed that the lingual psoriasis should be held to have determined the development of the epithelioma by the continued irritation of the mucous tissue of the tongue. It may be remembered that Dr. Weir, at a meeting of the Dermatological Society of New York, on January 5th, 1875, related a case of *ichthyosis of the tongue* in a patient who had had syphilis, in which, after the failure of specific treatment, section of one of the tuberose masses showed the microscopic characters of epithelioma.—*Tribune Médicale*, Dec. 19th, 1875.

Comparison of the Open with the Antiseptic Treatment of Wounds.—Kroenlein has carefully compared the results of Volkmann and Thiersch in their antiseptic treatment of wounds, with those attained at the Zürich clinique by the open treatment in similar cases. He finds the results almost alike under both modes. For purposes of comparison he makes use of the major amputations of the extremities, fractures of the long bones treated conservatively, and extirpations of the mammæ, together with pyæmia, septicæmia and erysipelas. His tables are so arranged as to show distinctly the effect of other factors which influence the result, such as age, sex, the kind and seat of the amputation or wound, etc., apart from the mode of treatment. Thus, to give a few of his figures, of seventy amputations treated antiseptically, the mortality was thirty per cent.; of eighty-five treated in the open way, only twenty per cent. In regard to the great success of Volkmann in treating compound fractures of the leg, much greater than that under the open treatment at Zürich, the author thinks that an explanation of this difference is to be found in the advanced age of many of those treated at the latter place. In the cases of extirpation of the mamma the open treatment resulted much the more favorably. He concludes that neither method has proved capable of averting erysipelas, but that both have rendered rare the occurrence of pyæmia and septicæmia. Under the antiseptic treatment the time requisite for a cure is decidedly shorter, and the function of joints better preserved, owing to the frequent occurrence of primary union. He regards the caustic and toxic qualities of carbolic acid as of great disadvantage in the antiseptic method, a difficulty which the use of salicylic acid may avoid. Then this latter method is far more expensive than the other.—*Langenbeck's Archiv*, XIX. 1.—*Berl. klin. Woch.*, Dec. 6, 1875.

A Case of Ulcerative Endocarditis Involving the Pulmonary Artery.—The following case is reported by Drs. Lehmann and Van Deventer, of Amsterdam. A laboring man of 46 years was admitted to the hospital on March 21st, 1875, and the diagnosis was made of acute croupous pneumonia, in the stage of resolution, of the lower lobe of the right lung. He did well at first, but on April 2d he was found to have a pleuritic effusion on the right side also, and on the thirteenth thoracentesis was performed with Dieulafoy's aspirator, and some twenty-one ounces of pus were withdrawn. This operation had to be repeated on the seventeenth of April, but after drawing about five ounces of pus no more could be obtained, although there was evidently more within the thorax. The patient died on the 21st, with symptoms of collapse, but at no time showed any symptoms whatever of cardiac disease. At the autopsy the right lung was found compressed upwards, and the space between it and the diaphragm occupied by a collection of some 42 ounces of pus, divided into two compartments by a vertical partition formed of the thickened pleura, which accounted for the imperfect results of the tapping. The calibre of the pulmonary artery was found to contain five fibrinous clots, adhering to the semilunar valves, which latter, though retaining their normal form, were ulcerated on their free surfaces and edges, so as to be almost transparent. There were also similar ulcerations on the lining membrane of the artery near the valves. There were no thrombi in the lungs. Under the microscope the diseased valves were found studded with small lymphoid cells of the size and form of pus cells, and the same was true of the ulcerated surfaces, where, too, the cells were lodged between fibrinous threads, which were immediately connected with the coagula mentioned. At the points of attachment of these coagula, and also in and among the pus cells, were everywhere to be seen accumulations of round, highly refracting, generally punctiform bodies, wholly destitute of motion, and which remained almost unaffected by various reagents. These particles were also found in the blood of the heart, in the pus from the chest, and in the canaliculi of the kidneys. The authors express their opinion that the empyema was the primary disease, but confess themselves utterly unable to determine whether the minute bodies they found were vegetable organisms or merely the detritus of tissue. This latter question, the very unusual occurrence of ulcerative endocarditis on the right side of the heart, and the absence of any symptoms indicating its presence during life, make this case worthy of interest.—*Berl. klin. Woch.*, Dec. 6, 1875.

Sudden Death with Albuminous Expectoration following Thoracentesis.—M. Oulmont reports the following case from the Hôpital Lariboisière. A female patient was admitted on the sixth day of an acute articular rheumatism. Auscultation revealed a

double endocardial murmur, most distinct at the apex of the heart. She improved steadily for nine days, but on the tenth day had a relapse of the articular pains, attended by effusion into both pleuræ. Eight days afterwards she was suddenly seized with a violent attack of palpitation and dyspnœa. The effusion was the same posteriorly, but anteriorly on the left side, there was dulness and friction sounds extended up to the clavicle. In view of the imminent asphyxia, thoracentesis was performed on the left side, but only 6½ oz. of a clear yellowish fluid were removed; false membranes constantly interrupting the escape of the fluid. A second puncture was made in the axillary line, but only a few drops of fluid escaped. Although the auscultatory signs were unaltered, the patient felt somewhat relieved. Five minutes later, however, she was seized with violent dyspnœa, and her mouth filled with an abundant, frothy, yellowish liquid. She spat up a spittoon and a half full of this fluid, and died twenty minutes after the operation. At the autopsy the borders of the mitral valve were found to be thickened. The left pleura was covered with soft false membranes, one-fifth of an inch in thickness, and contained about half a pint of yellowish fluid. There was atelectasis of the lower borders of both lungs posteriorly, but they were otherwise healthy. There were no traces of puncture of the lung, and no frothy fluid in the bronchi. What was death due to? Evidently not to perforation, nor to congestion and œdema, nor to absorption of the fluid left in the pleura. M. Raynaud has reported a case of instantaneous death following a simple incision of the skin, and he thinks it possible that death, in this case, was due to a reflex irritation produced by the puncture of the trocar acting on the pneumogastrics through the medulla. The irritation, however, must have acted slowly, and have produced an effect analogous to that neuro-paralytic œdema which is produced in animals by division of pneumogastrics.

In discussing a case similar to the above before the *Société Médicale des Hôpitaux*, M. Marrotte attributed the sudden death to syncope dependent on the sitting position in which the patient was at the moment. He did not overlook the influence of the derivation of blood resulting from the evacuation of a large amount of fluid, but attached more importance to the sitting position, for he had seen a certain number of typhous patients, in the stage of convalescence, who had died while sitting up. From this circumstance he deduced the rule never to perform thoracentesis with the patient in a sitting position.—*France Médicale*, Dec. 8th, 1875, and *Mouvement Médical*, Dec. 25, 1875.

Petroleum in the Treatment of Skin Diseases.—Dr. Maccormac recommends petroleum for porrigo and favus in preference to other remedies. The plan of treatment, so far as the scalp is concerned, is to clip or shave the hair closely. One part of petroleum is to be added to two of lard. This ointment should be applied gently but thoroughly once or twice a day. In cases that have been neglected, poultices of bread or linseed meal should be used before applying the ointment. After the application, a piece of dry, soft linen rag may be laid on, and over all a clean linen cap. Before the next application of the ointment, the head must be cleansed with black or fish soap, and warm water.—*The Practitioner*, October, 1875.

Suppuration of the Lachrymal Sacs in Infants.—Mr. Hutchinson, speaking of this uncommon affection, says he has only seen two cases. In both of these, pressure over the lachrymal sacs caused the pus to regurgitate freely through the canaliculi. There was no redness, or evidence of inflammation. He found it difficult to form any conjecture as to the cause of the symptoms in these two cases. Both the children were quite healthy; in both it occurred so immediately after birth, that it was difficult to suspect any exposure to cold, and in both it occurred on each side, making the action of any accidental cause improbable.—*The Lancet*, December 18, 1875.

On the Anatomy of the Position and Changes in Position of the Uterus.—Pausch of Kiel calls attention to the want of agreement between the results of anatomical investigation and the views of gynecologists on these matters, the difficulty being referable largely to the effect of post-mortem changes in the position of the uterus. He considers the delineations of Kohlrausch the best that have been produced. They were made from alcoholic preparations, with the bladder and rectum filled with cotton. In effecting the post-mortem changes he attributes great influence to the disappearance of the swelling of all the tissues and of the contents of the vessels, to the contraction of the muscles, and to the action of gravity, which now comes into play. Intra-abdominal pressure must also be considered; and as these changes increase with the lapse of time, it is important that the investigation, to be accurate, should be made early. As the filling of the bladder and rectum lead to changes in the position of the uterus, either in part or as a whole, there is no "normal" position for it, but only a "medium" one. The attachments of the uterus, he says, consist of its connection with the wall of the vagina and with the circum-cervical layer of connective tissue bounded behind by the abdominal cavity, in front by the bladder, and laterally losing itself in the connective tissue of the pelvis. Then there are the well-known duplicatures of the peritoneum, and under them he describes two strands of muscular fibres arching from the broad ligaments to the pelvic wall in front or behind.—*Arch. für Anat. Phys. u. wiss. Med.*, 1874, 6, p. 702.—*Schmidt's Jahrb.*, 168, II., 1875.

Atrophy of the Optic Nerve in Pott's Disease.—M. Abadie has observed this atrophy in a patient suffering from Pott's disease at the level of the first lumbar vertebra, where the first symptoms had coincided with the ocular troubles. He regards it as probable that in a certain number of cases, atrophy of the optic nerve, without apparent cause, may be symptomatic of a Pott's disease, of which the symptoms referable to the spine and cord have disappeared some time before. The ocular complications have not been more frequently observed, partly because the osseous lesions have disappeared at the time the former were discovered, partly because Pott's disease only induces them when it is located at certain special points, as at the level of the cilio-spinal centre. The above fact is therefore held to indicate the propriety, in cases of atrophy of the optic nerve, of examining the spine, and of applying appropriate treatment to the angular curvature, if any should be found.—*Journal de Méd. et de Chir.*, Jan., 1876.

Probable Intussusception Reduced by Injection with the Body Inverted.—This method was put in use by Mr. Waren Tay in an infant seven months old, where the intussusception had been in existence thirty hours. As much warm water as possible was injected, while the child was held up by the feet. The relief was immediate, and the tumor which before was felt per rectum, disappeared entirely. Mr. Hutchinson has repeatedly insisted, that it is not material whether air or water be injected, but it is very important to have the patient held up by the heels.—*The Lancet*, January 1, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, March 4, 1876.

THE ARMY MEDICAL SERVICE.

The medical staff of our own army is not alone in its discontent concerning increase of rank and pay. In Great Britain, for instance, the dissatisfaction concerning the privileges of the line officers compared with those of the medical staff is so great, that it is almost impossible to obtain candidates for the entrance examination. Indeed, the government has been, for this reason, compelled to postpone such examinations, and the vacancies created by death and promotion are not likely to be filled by first-class men. For a short period after 1858 that service seemed to be quite popular with the profession, as it held out reasonable hopes of fair remuneration for the time being and a promise of future increase in rank and pay, commensurate with length of time in the army, increase of experience and consequent increase in usefulness. Soon, however, the jealousy of the line manifested itself in many curtailments of rights, positive and relative, until the army surgeon virtually finds himself in the same position as he was before any of the reforms, which he had so long asked for, had been initiated.

The *London Lancet*, in speaking of the drawbacks of this branch of the service, refers particularly to the slowness of promotion, and the almost certain prospect "that a young man, however able, industrious, or ambitious, would have to retire at the end of twenty-five years' service—most of it foreign—with the mere rank and pay of surgeon-major." All this time the training for the medical profession is becoming more difficult and expensive, at the same time, by a recent warrant, the work of the medical officer is increased, and the pay is diminished. This, then, is the state of affairs in Great Britain, and an effort is to be made during the present meeting of Parliament to remedy the difficulty by appropriate legislation.

In Germany a similar dissatisfaction exists regarding the vexed question of increased rank and pay, appeals for relief are unheeded, and there is great difficulty in filling the lower grades with competent men. The medical department of the Prussian army was considered in advance of those of all other countries in the perfection of its system of appointment, promotion, and pecuniary compensation; but the strides of improvement which have been taken, especially during the past few years, are so effectually checked, that only such as are compelled to do so stay in the service. It appears that the Imperial Government has not made good its promise to fulfil all the conditions of the army warrant of 1873, the consequence of which has been a considerable amount of pecuniary stinting in the lower grades. The war minister, yielding to the pressure of professional sentiment, asked for increase of funds, but with no avail, and the vacancies still exist. The latter condition of affairs obtains in our own army, and for a like reason. The same disposition to ignore the actual value of medical services is so strikingly apparent here, that no young medical man ever thinks of remaining in the army more than the few years which may be necessary to bridge over the threatened impecuniosity of his early professional career. And this will continue to be the case so long as the authorities refuse to recognize our claims, and decline to offer to us adequate inducement for faithful and efficient services.

At a time when special and renewed efforts are made to secure the passage of a new law for the relief of our own army medical staff, this subject of medical army bills becomes a matter of special interest.

Although the experiences across the water are not very encouraging, we have reason to believe, in view of the reasonableness of our demands, that the petition will be granted. And even then our medical staff will be so much below that of any other country, in the matter of rank and pay, that their complaints should be viewed in the light of arguments to prove what we ought to have, rather than what we now ask. If, however, the bill does not pass, the trouble of vacancies on the medical staff will not only continue to exist, but will increase, for the simple reason that the profession will abandon the idea of ever obtaining their rights by legislation, and will leave the army to take care of itself. It may after all be possible that such a state of things will occur before justice is done. But we are for the present, at least, willing to wait and to hope.

THE CARE OF OUR HOSPITAL PATIENTS.

The Committee of the State's Charity Association has published its annual report, based upon observations made concerning the care of the sick poor at Bellevue Hospital. Although the general condition of this institution is far from what it should be, and although many complaints of shortcoming are made, it is a matter of surprise that they are not even greater in number and more difficult, under the present system

of management, to remedy. The want of the proper number of surgical instruments and surgical appliances is certainly a very grave one, and for which there can be no possible excuse. Neither is there any good reason why the patients should not have a suitable amount of clothing, intelligent and efficient nursing, or a proper supply of substantial and nourishing food. The want of soap forms a very just ground for censure of the authorities, and shows as much as any apparently trivial matter can, the lack of forethought as to suitable provision of necessaries. But, taking everything into account, we are glad to find that it is no worse. With no desire, in the face of the facts, stated and vouched for, by the Committee, to offer any excuse for negligence in the discharge of sacred trusts, there are, however, many circumstances to be taken into account when we view the subject of management of this institution in a strictly impartial light. In the first place the Commissioners are a part of a political machinery which must be in the interest of patronage to party; consequently many, if not all, of the appointments of superintendents, orderlies, and nurses must be of a political character. Although this in itself is an evil, it can never be remedied short of a total abolishment of the whole system. In the second place, the funds appropriated to the support of the institution, allowing that they are judiciously and honestly employed, are limited, and the Board have to measure the expenditures accordingly. The greater or lesser quantity of this appropriation has an important bearing upon the quantity and quality of the food furnished, as well as other necessities. The food may not come up to the standard of fitness demanded by a committee of gentlemen and ladies accustomed to the luxuries of good living, but must nevertheless be regulated by the price *per capita*, which is so arbitrarily regulated by a certain limited amount of money. Not very long ago this vexed question was pretty thoroughly discussed by the Board, when it was determined to shift the responsibility of constructing a general diet table upon a medical gentleman, a member of the medical staff, whose fitness for assuming such a responsibility was unquestioned. The result, as claimed by the Commissioners, is that as nutritious, varied, and substantial diet is allowed the patients as can be obtained anywhere for the amount of money expended. If the full amount of this special appropriation is honestly expended, we see no particular reason to complain. Until the contrary is proved by the Committee, the responsibility of any neglect in this particular must rest upon the authority which fixes the price. Again, we must take into consideration the fact that the majority of the patients being paupers, they are not accustomed, even in health, to what people in the higher grades regard as absolute necessities.

In regard to the matter of so-called extras for those who are very sick, it is impossible to offer any excuse for not heeding the orders of the attending physician. If a limited amount of money is allowed for food in general, there should be enough of good management and consistent economy to enable the hospital authorities to set apart a so-called hospital fund to meet the exigencies which are so constant and so pressing in an institution of this size. This has been over and over again proved to be practicable during our late war, in the management of the military hospitals.

INFECTIOUS DISEASES IN SCHOOLS.

Our English contemporaries are much interested in the discussion of the proper means of preventing the spread of those infectious diseases among school children which are obscure in their invasion, mild in their progress, and variable as to the time when the danger of propagation is past. Whooping-cough being a disease of this class, and being at the time epidemic in Great Britain, a great deal is said about it in connection with practical epidemiology. To prove, however, the difficulty in the way of preventing the contagion, a correspondent of *The Lancet* states, that while health officer during a recent epidemic of whooping-cough, he issued a circular to the various schoolmasters and schoolmistresses, requesting them to have all children suffering, or suspected of suffering, placed upon the sick list and isolated. At that very time, one of the children of that gentleman was suffering from the disease, and was running about at large, entirely unsuspected. In fact, it was only when this child's brothers and sisters contracted it from him that the existence of the affection was recognized. Of course, nothing can be done in a practical way to prevent the spread of contagion under such circumstances of insidiousness of attack, but in the more pronounced cases some effort, at least, can possibly be made to isolate all those children known to have been exposed. At best, however, it is a problem for practical sanitarians, and the discussion which it is likely to receive may yet end in some practical results.

The Albany Medical College, Reorganization of the Faculty.—The following gentlemen have been appointed to the professorships named in the above institution:

S. Oakley Vanderpoel, M.D., Professor of Theory and Practice and Clinical Medicine; John V. Lansing, M.D., Professor of Materia Medica and Clinical Medicine; John Swinburne, M.D., Clinical Surgery; Albert Van Derveer, M.D., Surgery; John V. P. Quackenbush, M.D., Obstetrics; Samuel B. Ward, M.D., Surgery; Jacob S. Mosher, M.D., Hygiene and Medical Jurisprudence; Lewis Balch, M.D., Anatomy; Maurice Perkins, M.D., Chemistry; John P. Gray, M.D., of Utica, Mental Diseases; Edward B. Hun, M.D., Nervous Diseases; William Hailes, M.D., Anatomy, Histology, and Pathological Anatomy; George T. Stevens, M.D., Diseases of the Ear; J. P. Boyd, Jr., M.D., Diseases of Women and Children; Cyrus Merrill, M.D., Diseases of the Eye; Willis G. Tucker, M.D., Chemistry; Henry March, M.D., Curator, etc.

Reviews and Notices of Books.

PRINCIPLES OF HUMAN PHYSIOLOGY. By WILLIAM B. CARPENTER, M.D., F.R.S., F.G.S., F.L.S., etc. Edited by HENRY POWER, M.B., London, F.R.C.S. Eighth Edition. Philadelphia: LINDSAY & BLAKISTON, 1876. 8vo, pp. 1176.

THE first noticeable feature of this work is its immense size and its unwieldy shape; but the reader, although he would much rather have one volume in two, as two in one, is quite willing to overlook the forethought of the publishers, in consideration of the great amount of varied information to be found between the covers. Although, as the editor justly expresses it, it is impossible to give more than an outline of the more important results of recent research, the work itself, in regard to the faithfulness with which this outline has been presented, may be considered a skeleton cyclopædia of the science. The principal results of the numerous physiological researches which have taken place during the past five years are faithfully and comprehensively recorded, leaving nothing to be desired by one who wishes for a thoroughly trustworthy book of reference. These remarks apply with equal force to the recent improvements in microscopy in its application to the examination of tissues, as well as to the philosophical interpretation of the various complex functions of the human organism. The relations of these are not only explained in a practical manner, but their bearing upon pathological anatomy are considered with a faithful minuteness worthy of the highest praise. The new methods of making microscopic sections are particularly commendable in this connection. The microscopic anatomy of the different organs of the body and their functions are very elaborately considered, while many of the descriptions given are rendered more lucid by elegant wood-cuts. This is all that can be said in praise of the work in a general way. To the practitioner it is of the utmost value as a work of reference, for in it he will find all that he cares to know concerning the structure and functions of the body, and to the student who may be more particularly devoted to this particular branch, it is indispensable. We have experienced the greatest satisfaction in the perusal of certain chapters in this volume, and taking these as indices of the whole work we cannot say too much in its favor.

THE BODY AND ITS AILMENTS. A Hand-book of Familiar Directions, etc., for Care and Medical Aid in the more usual Complaints and Injuries of Adults and Children, etc. By GEO. H. NAPHEYS, A.M., M.D. Philadelphia: H. C. WATTS & Co. 1876.

THIS is a book written for the people, and will doubtless do a considerable amount of good in the way of general enlightenment upon medical subjects. There is one thing in its favor which we cannot say in general of works of its class, and that is, it does not endeavor to make the layman a self-prescriber. In the effort to give the most information for the money, the author occasionally outsteps the bounds of discretion in advising his readers concerning some of the operations in minor surgery, which are often difficult in the hands of experts. This will prove no fault in the work if the layman, in his presumption of self-knowledge, does not abuse the privilege of judging for himself when and how any even a simple remedy is to be applied.

ANNUAL REPORTS ON DISEASES OF THE CHEST, under the direction of HORACE DOBELL, M.D., Consulting Physician to the Royal Hospital for Diseases of the Chest, etc., assisted by DRS. ADOLPHE WAHLTUCH and R. SHINGLETON SMITH. Vol. I., June 1, 1871, to June 1, 1875. London: SMITH, ELDER & Co., 1875. 8vo, pp. 328.

THIS is the first volume of a series which will be published yearly, under the supervision of Dr. Dobell, giving a comprehensive, discriminate, and practical digest of progress in the treatment of chest diseases throughout the world. The editor has given evidence of great care in the selection of his extracts, and has amply availed himself of his extraordinary facilities for gathering information on this subject of his report from all quarters of the globe.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, February 9, 1876.

DR. CHAS. K. BRIDDON, PRESIDENT, IN THE CHAIR.

URÆMIA AS A CAUSE OF DYSPNŒA, ETC.

DR. JACOBI presented specimens of the kidney, spleen, and portions of the respiratory apparatus, removed from a female patient of Bellevue Hospital. She was twenty-four years of age, a hard drinker, and had lived a very irregular life. Last November she had a miscarriage at the seventh month, which confined her to bed for about ten days. Nothing of any importance, however, could be learned concerning the symptoms from which she suffered on admission. She stated that she had a "cold" for ten days, and that three days before admission she lost her voice and began to suffer from dyspnœa. Examination of the lungs gave only negative results. Respiration was 26–30; pulse, 120–140; temperature by vagina, 99¼°; extremities cold. Dr. Jacobi saw the patient for the first time the day after her admission, February 5th. At that time she was aphonic, and was suffering from dyspnœa. The latter was of a twofold character: in the first place showing all the signs of laryngeal obstruction, at the same time the frequency of the respirations pointing to an abnormal condition of the lungs. On careful examination of the latter organs, there were evidences here and there of broncho-pneumonia. In looking for the cause of the laryngeal trouble, it was found that the tongue and pharynx presented a very unnatural appearance. The former was red, but not denuded of epithelium, was dry and hard, showed a number of elevated papillæ, and a number of well-defined grooves between. The pharynx was in about the same condition. Altogether, the parts presented a scaly appearance, similar to the condition of psoriasis on the external surface. Introducing the finger into the throat, the epiglottis was found stiff, hard, and thick, being more or less immovable during respiration. The larynx appeared to be in the same condition as the tongue. It was thought that the disease extended even beyond this point, and afforded an instance of a rare affection of the air-passages, characterized by an epithelial growth in the form of scabs, which sometimes necessitated operation for the dyspnœa which it occasioned. The diagnosis in a general way, however, was pharyngitis, laryngitis, tra-

cheitis, and broncho-pneumonia. Laryngotomy or tracheotomy was not advised in consequence of the lung complication, but the dyspnœa increasing it was considered imperative to open the larynx, and the operation was performed by Dr. Welch, house-physician, with temporary relief. She soon after grew worse again, and died February 6th.

The tongue, epiglottis, larynx, trachea, and upper bronchi, having been preserved in fluid, did not, of course, show the dryness noticed during life, but throughout their whole extent they were hyperæmic. The muciparous follicles of the trachea were somewhat swollen. Although there was some thickening in the air-passages, there was not enough to account for the dyspnœa. After death, there was found a certain amount of œdema of the lung, due probably to her dying condition. Dr. Jacobi believed that the dyspnœa had been due to a large amount of blood-vessel dilatation, which partly disappeared after death. Besides being œdematous, the lungs presented evidences of lobular condensation. The spleen was enlarged and lobulated. The principal interest, however, centred in the kidneys. The urine had not been examined during life, but the kidneys were in a condition of disease which had undoubtedly existed for a long time. Both organs were in a state of advanced nephritis, and contained abscesses. In regard to the question of diagnosis, the latter specimens were of interest in proving that the original cause of the congestion in the mucous tract was not appreciated during the patient's life.

DRYNESS OF MOUTH IN BRIGHT'S DISEASE.

Dr. Seguin remarked that Dr. Draper had called his attention to the fact that an unnatural dryness of the mouth and throat were very significant symptoms of chronic Bright's disease. In a number of instances he had been able to test the value of these signs.

Dr. Jacobi stated that the observation was undoubtedly correct, and that the case under consideration was an example of the sort. In answer to a question from Dr. Loomis, he remarked that the broncho-pneumonia could be explained by the want of air in the lungs reducing the pressure upon the blood-vessels, and in its turn inviting congestion and inflammation, but he believed that the œdema was simply a result of the dying condition.

DIPHTHERIA.

Dr. Lewis Smith presented the air-passages of a child aged six years, who had died of diphtheria, Feb. 7th. This patient had a brother three years of age who was attacked with the disease at the same time, and in the same way. Both had dyspnœa, hoarseness, and loss of voice, and in neither were there any signs of pseudo-membrane in the fauces. The temperature in each was about 100° F., pulse 95, and in the beginning (Feb. 2) no albumen nor casts were found in the urine. Both were able to run around, and the only symptoms of trouble were those belonging to laryngeal obstruction. Quinine was ordered for both children, three grains every two hours for the older, and half that quantity for the younger. The latter child, however, was exceedingly obstinate, and the medicine could be given only at very long and irregular intervals, and practically speaking it was without any treatment whatsoever. His brother, six years old, was, on the contrary, very anxious to take his medicine, and submitted patiently to the persistent use of the vapor of lime water, by Codman and Shurtleff's (Boston) apparatus. On the second or third day of attendance a considerable amount of fibrinous exudation was expectorated, but the relief was only temporary, the dyspnœa returning, and continuing to increase until death occurred Feb. 7.

The urine was not albuminous until thirty-six hours before death. Although no casts were discovered, the urea was in great excess. The younger child, despite the lack of treatment, was living at the time of making the report, and was as obstinate as ever.

At the autopsy made by Dr. Satterthwaite the lungs were found in a semi-collapsed state. The pericardial sac contained two drachms of transparent serum. The surface of the heart was normal. There was a large, firm, white clot in the right ventricle, extending into the pulmonary artery. In the right auricle there was also a large, dark clot with light centre, and slightly adherent. The cavities of the left heart contained a moderate amount of blood, which had a "tarry" appearance. A small point of diphtheritic deposit, not more than two lines in diameter, was found upon the left tonsil. There was, however, a firm exudation covering every portion of the larynx and trachea, entirely enveloping and concealing the vocal cords. This exudation was traced down to the bifurcation, and along the bronchi, to the left side. The left lung was examined, but no membrane was found below the first bronchus, merely a thickening of the mucous membrane by injection. There were no signs of pneumonia in this lung, although some signs of pneumonia were found in the upper lobe of the opposite one. The case was one in which, in the opinion of Dr. Smith, tracheotomy might have been followed by recovery. The membrane in the trachea was too thick to be favorably affected by the spray.

Dr. Satterthwaite, by invitation of Dr. Smith, gave the following description of the lesions found in the right lung: The pseudo-membrane was traced until it gradually faded away in the bronchi of the third degree. Beyond that point the mucous membrane was injected, and somewhat thickened. The upper lobe was in a condition of pneumonia, as well as upper portion of lower lobe. The middle lobe was merely congested. The bronchial glands were enlarged to a considerable extent. In the upper portion of the air-passages, where the membrane was thick and adherent, it had an opaque, cheesy appearance, but lower down, where it was thinner and less adherent, it was more translucent.

The examinations of the spleen, kidneys, and lung-tissue were made in conjunction with Dr. Edward Curtis, a detailed report of which was promised.

A short discussion ensued in regard to the supposed antiseptic effect of quinine upon bacteria, the opinions expressed being decidedly in the negative.

MYOCARDITIS AND SYPHILIS.

Dr. Burchard presented a heart removed from a young man aged twenty-five years, who, for the past fifteen years, had been addicted to the excessive use of alcohol. Dr. Burchard was first called to see the patient November 29, who was at the time suffering from an attack of double pneumonia. The case progressed favorably, and resolution was taking place when, on the tenth day, he was seized with a chill, which ushered in a double acute pleurisy and pericarditis. A diagnosis of these conditions was made accordingly, and subsequently confirmed by Dr. Loomis, who was called in consultation. No particular points of interest marked the case until January 19, when the patient began to experience excessive dyspnœa and great deterioration of strength. Dr. Loomis again saw him, and at that time made the diagnosis

of myocarditis. During the last week in January the patient developed well-marked syphilide. The strength rapidly failed, the dyspnœa grew more and more urgent, and on Sunday evening, February 7, he died.

The autopsy revealed excessive effusion in both pleural cavities. The lungs were comparatively healthy, although compressed by the effusion. The pericardial sac contained an immense amount of serous effusion, and its surface covered with plastic effusion. The heart was enlarged and dilated, and the substance of its walls almost entirely replaced by interstitial cellular growth. The liver was cirrhotic, and the kidneys enlarged and waxy. In some tubules there were immense deposits of uric acid crystals.

Dr. Loomis, in connection with the foregoing case, remarked that his experience had led him to believe that myocarditis was of much more frequent occurrence in connection with attacks of acute endocarditis and pericarditis than the statements of authorities would lead us to believe. In the present instance the diagnosis was very easy. The action of the heart was exceedingly feeble and labored, and the sounds peculiarly indistinct. He expressed the opinion that the train of chest symptoms was due to syphilitic infection, which did not declare itself until the eruption appeared, and after the lungs and heart had been involved.

SYPHILITIC AND SIMPLE PACHYMENINGITIS.

Dr. Seguin exhibited a section of the diseased dura mater, presented at the previous meeting by Dr. A. H. Smith, in order to prove not only that the diagnosis of gummy tumor was correct, but to exhibit some of the microscopic characters of the growth.

He presented a second specimen, likewise a section of the dura mater, the lesions of which were simply inflammatory in character. It was removed from a gentleman of Texas, who had been sent to Dr. Seguin by Dr. Hadden, on account of persistent headache. Five weeks before that time the patient had been exposed to a very hot sun, and although not suffering from any of the symptoms of sunstroke at the time, he subsequently was attacked with headache, from which he never entirely recovered. The headache was first seated in front, about the median line, over the region of the anterior fontanelle. It gradually extended backward in a symmetrical fashion until it ultimately became seated in the occiput and back of the neck. His pulse was 55, and regular. He was examined very carefully, and nothing was found upon which the diagnosis of organic disease of the brain could be based, and for the want of a better name the malady was called congestive headache. The patient went to the country, and, returning again in the fall, died. Dr. Seguin did not see him at the time, but had been informed that he had died comatose. There had been no difficulty of deglutition at any time, nor paralysis of any kind. Dr. Clymer, who had seen the case in consultation, was reported as non-committal in regards to a diagnosis.

The autopsy was made by Dr. Hadden, and showed a large clot over the convexities of both hemispheres on the external surface of the dura mater, and enveloped between it and another membrane of new formation. This latter was formed originally as the result of inflammation, was embryonic in character, and contained a large number of newly forming blood-channels. This condition of things was quite satisfactorily shown under the microscope to the members. The opinion was expressed that one of these blood channels had ruptured, producing the effusion in the substance of the new growth, giving the said effusion the gross appearances of a clot between two membranes.

Dr. Sell exhibited the cervix uteri removed by operation from a lady in Staten Island, the mother of four children, who had suffered for the last twelve years with all the distressing nervous symptoms which are associated with chronic enlargement of the organ. The operation was very satisfactorily performed by means of Dawson's battery. The patient promised to make a good recovery.

The Society then went into executive session.

Correspondence.

THE METRIC SYSTEM IN PRESCRIPTIONS.

To the Editor of The Medical Record.

Sir:—Can we not, at least those of us who are not too old to learn new things, make an effort to introduce the metric system into our prescriptions? Scientific men, the world over, here as elsewhere, adopt it for almost all measurements, whether of weight, length, or capacity. It has for several years been legalized in this country, and it is universally acknowledged by all who take the trouble to learn it to be the most satisfactory and convenient system ever proposed. Why then is it not adopted by a profession which claims to advance with the age? Simply because men are too indolent to spend a half hour in acquiring the few data which would enable them at a moment's notice to translate a grain and ounce prescription into a metric one. If they will simply remember that a *gramme* is about 15 grains, or the quarter of a drachm (Troy), and that 30 grammes weigh about an ounce (T.), the thing is done. A few weeks' practice will enable them to *think* in the metric system, and save the trouble of translating their ideas into it. Surely it is worth while to do this, and to get rid of our present system, in which we have, for instance, ounces of three different weights, viz., ℥ i. (av.) = 437.5 grains, f. ℥ i. = 455.56 grs., and ℥ i. (Troy) = 480 grs.

In writing a prescription by the metric system, the quantity of each ingredient is expressed, in multiples or fractions (decimal) of a common unit, which, of course, will be the gramme, thus:

GRAMMES.

℞ Hydrarg. proto-iod. . . . . 1.
Ext. lactucarii . . . . . 3.
M. Ft. pil. No. lx.

or

GRAMMES.

℞ Strychniæ sulph.,
Acidi arseniosi, āā 0.03
Quiniæ sulph. . . . . 2.
Ext. gentian. co. . . . . q. s.
M. Ft. pil. xxx.

I have adopted this plan myself, and would most seriously urge it upon the attention of those who have not travelled the bad old way so long, that a new departure is impossible.

Respectfully yours,
H. G. P.

George Green Gascoyen, F.R.C.S., one of the Surgeons of St. Mary's and Lock Hospitals, London, died in that city of pleuro-pneumonia, Jan. 23, in the forty-sixth year of his age.

NOVEL USE OF APOMORPHIA.

To the Editor of The Medical Record.]

Dear Sir:—The report of the following case may be interesting to your readers, so far at least as it suggests the value of the comparatively new remedy, apomorphia, in a class of cases in which I have not heard of its having been used. On the 30th of November, 1875, I was called to see a little boy, three years old, who had, two hours previously, accidentally swallowed a *biconvex lense-shaped tin whistle*. I found it lodged near the cardiac terminus of the œsophagus. The little fellow was suffering considerable pain, writhing his body when he attempted the act of deglutition, which act seemed irresistible every few seconds. A small quantity of bread and water was given him to ascertain whether the œsophagus might be completely occluded. He rejected it almost immediately, with no admixture of the stomach contents. I then administered hypodermically in his arm the one-twelfth ($\frac{1}{12}$) of a grain of apomorphia. In three minutes, by the watch, the emetic quality of the drug was manifested by pallor. He was then placed on a bed, flat on his belly, when, after three or four violent attempts, he in one heave emptied entirely the stomach, the whistle taking the lead, and ringing, as it fell in the basin, produced a most agreeable sound to the ears of the anxious mother, who before had but little faith in my expedient. The whistle measured $1\frac{3}{16}$ inches in diameter. The child, when seen an hour later, was bright and running about as well as ever.

Respectfully yours,

Ed. T. Robinson, M.D.

Richmond, Va., *Feb.* 21, 1876.

Obituary.

JAMES HINTON, M.R.C.S.

The death of the distinguished aurist and metaphysician, Mr. James Hinton, of London, was a very sad surprise to many of his friends in the United States, who did not know of his illness until the announcement was made in the London papers that he had died on the 16th of December, at St. Michael's, in the Azores. Mr. Hinton was about 52 years of age when he died. He had retired from practice about a year and a half before his death, for the purpose of engaging in some studies very congenial to his disposition. Among other subjects, the expression of force and truth by means of drawing and painting, was one to which he gave a great deal of time during the last few years of his life. He was a warm admirer of Constable and Turner, and he proposed to give a series of lectures to selected hearers during the next spring and autumn in New York, New Haven, and Cambridge, upon the study of art. Mr. Hinton's enthusiasm, on this and other subjects that interested him, was marked, and seldom failed to elicit responsive attention and sympathy from those who have enjoyed his entertaining conversations. Although Mr. Hinton was the author of several works on various subjects, "The Mystery of Pain: a Book for the Sorrowful," "Life in Nature," and was also a frequent contributor to the English magazines, he was chiefly known in this country as a successful aural surgeon, who contributed largely and well to the knowledge of the profession in otological science. His papers on the Pathology of the Ear, in Guy's Hospital Reports, the Appendix to Toynbee on the Ear, the article on Aural Disease in Holmes's Surgery, "Questions in Aural Surgery," and the Atlas of the Membrana Tympani, have made for him a reputation which perhaps will be as enduring as our language. Mr. Hinton studied medicine at St. Bartholomew's Hospital, in London, passing his examinations in 1848. He spent a year after this in Jamaica, having taken charge of a cargo of free negro laborers going from Sierra Leone to that island. He visited New Orleans, but embarked for England from that place without having been in the Northern States. He married in 1852, and practised as a surgeon in London for some years. In 1855 and 1856 he spent much time with Mr. Toynbee, and arranged his famous museum for the illustration of aural disease. Mr. Hinton retired from practice in 1858 or 1859, but returned again in 1862, and was appointed Aural Surgeon to Guy's Hospital, a position that he retained until his final retirement. He also succeeded to Mr. Toynbee's private practice in 1864. Mr. Hinton was looking forward with great interest to his proposed visit to America, where he had many admirers. The coming International Congress of Otologists was one of the attractions from which he promised himself much satisfaction, and of which he spoke in all his late letters to his friends on this side the water. Mr. Hinton was a man of decided religious convictions, believing firmly in a personal God. It is often thought, that in order to attain great success in any calling, there must be a preference for that above all others. Mr. Hinton's life is an evidence that a man who is constantly hoping for a day when he may forsake the avocation by which he earns his bread, for one more completely to his tastes, may yet be eminently successful in his enforced occupation. But we may not think that Mr. Hinton had a great distaste for his profession. He enjoyed even its laborious details, which he worked upon with industry, genius, and skill, and he acquired a large and lucrative practice, so that his waiting-rooms were among the most crowded of London; yet he always seemed to feel that there was a larger field for him than the practice of aural surgery. Just as he had well entered upon the prosecution of that, he passed into immortality.

Mrs. Hinton, two sons who are graduates of Cambridge and Oxford respectively, and one daughter survive Mr. Hinton. D. B. St. J. R.

CHANGES IN THE PUBLIC SERVICE.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from Feb. 20th to Feb. 26th, 1876.

ARMY.

McKee, J. C., Surgeon.—Assigned to duty as Attending Surgeon at these Headquarters. S. O. 15, Department of California, Feb. 15, 1876.

Storrow, S. A., Assistant Surgeon.—Assigned to duty at the Presidio of San Francisco. S. O. 15, c. s., Department of California.

Williams, J. W., Assistant Surgeon.—Ordered before Army Medical Board, New York City, for examination for promotion; upon its completion, to accompany the first detachment of recruits to Department of Dakota, and until it is forwarded, assigned to temporary duty at Fort Columbus, N. Y. H. S. O. 34, A. G. O., Feb. 21, 1876.

Steinmetz, W. R., Assistant Surgeon.—Assigned to duty at Fort Wallace, Kansas. S. O. 28, Department of the Missouri, Feb. 16, 1876.

De Loffre, A. A., Assistant Surgeon.—Assigned to duty at Camp, near Cheyenne Agency, Indian Ty., S. O. 28, c. s., Department of the Missouri (now known as Fort Reno, Indian Ty.).

Medical Items and News.

Virchow.—A word about Virchow, and I will close. All in all, he is one of the most remarkable medical men I ever knew. His *personnel* is by no means striking. He is below the average German stature, of a dingy complexion, and with an impassioned expression; one fails to detect the depth of his researches in science, or the strong will or the cutting sarcasm which characterize him. An hour in the Pathologisches Institut easily demonstrates his accurate study in that part of medical science to which he has devoted the most hours of the best part of his eventful life. His political tenets, at variance with those of the chancellor of the empire, and in sympathy with that large radical party of Germany whose ideal may be seen in nearly every European government of to day, call it by whatever name you please, liberalism, radicalism, or conservatism, have developed an iron will and a bitter sarcasm which make him a species of terror to the government. In other ways is he remarkable. Always late at his lecture, and appearing now but twice a week, he has time enough, apparently, for the numerous demands made upon him. On the same day he is to be seen from nine to eleven A.M. in the Pathologisches Institut, demonstrating, with a vast array of material, cellular pathology; and from five to seven or eight P.M. in the Chamber of Deputies of Prussia, of which this week he was elected vice-president, over the nomination of his predecessor; later, hard at work in the Royal Geographical Society. Besides these official appointments he is chief editor of a popular journal of science, contributes occasionally an article to scientific bodies, and gives popular lectures in the winter. I have alluded to his life as an eventful one. It may not be generally known on our side of the water that in the revolution of 1848 he fought as a common soldier behind the trenches; that he was forced to abandon his professorship here on account of his political doctrines, and that he went to Würzburg, where the book of his life—the exposition of the cellular pathology — was written; that the government was obliged to recall him to his department in the university on account of the urgent demand of scientific men, who recognized his worth by the new book; that later Prince Bismarck challenged him to a duel, whose acceptance he had the courage to refuse; these and many other events of his life make Rudolph Virchow one of the most conspicuous men of the day in Germany. I am told that he regrets the comment not long ago made about him, that he was a severe critic as to the merits of other men. Virchow is poor, lives on the second flight, and complains that he cannot live as a gentleman of his standing should. —*Boston Medical and Surgical Journal, Letter from Berlin.*

Sulphite of Soda in Acute Dysentery.—Dr. John B. C. Gazzo, of Thebodeau, La Fourche Parish, La., wishes to call the attention of the profession to the virtues of sulphite of soda as a remedy for dysentery. He employs it in the following manner:—

℞	Soda sulphis	ʒ i.
	Acid salicylici	ʒ ij.
	Aquæ destil.	ʒ v.
	Syrup. rosa galli., U. S. P.,	
	Tinc. opii ℥ ll, āā	ʒ ss.
	Syrupi vanilla	ʒ i.

Misce. Fiat mistura.

The mixture was given in half tablespoonful doses, with an equal quantity of fresh milk every half hour. On account of its antiseptic and disinfectant properties he believes it can be employed in the form of an enema, and that it will not only destroy or annihilate the offensive, decayed, and putrid evacuations, but will also give considerable relief to the patient. The ordinary means for keeping up the circulation are also employed, such as stimulating antispasmodic liniments to the bowels and limbs. All of his cases did well.

Transactions of State Societies and Medical Journals.—The editor of the *Philadelphia Medical Times*, in noticing a number of volumes and pamphlets of State Transactions, says: "The amount of money which is yearly expended upon the printing of Transactions, of very little or no value, in the United States, must be enormous. It seems to us that it would be far better if every County or State Society would subscribe to some journal, to be supplied *en masse* to its members, printing nothing but the merest outline and business minutes, and turning into a useful channel the yearly sum now bestowed upon the typographer. A live weekly or bi-weekly journal would be a continual stream of light in many a place now sitting in darkness, and one year of trial would, we are convinced, render the present plan utterly obsolete. The success of the British Medical Association dates from the time when it created and furnished to its members the *British Medical Journal*. By massing numbers, it becomes possible to furnish a costly journal at a very small price per copy. Ten thousand subscriptions at two dollars make twenty thousand dollars, and would support a much more princely journal than could be furnished to three thousand subscribers at four dollars. The strength of numbers is nowhere more apparent than in journalistic enterprises, and, in spite of the enormous amount of journals published in the United States, the need of journalistic light was never greater than at present. The number of the journals published, instead of making them superior, through the stimulus of competition, renders them weaker, through the want of food. The subscription list being small, the outlay upon the journal must be proportionate. Let us hope, then, for a consolidation of American journals, and also for the abandonment of the Transaction publication, and the adoption, by State Societies, of general subscription to journals in behalf of members."

Charges to Clergymen.—The *American Medical Weekly* speaks in favor of no charge for professional services to clergymen. On principle we believe the doctrine to be correct, but there are many exceptions to the rule, which may occur to every poor practitioner who may consume valuable time in attendance upon a wealthy minister.

Charles O'Reilly, Esq., M.D., on his retirement from the office of Resident Physician of the City Hospital, Hamilton, Ont., was presented with an elegant service of plate. It is unnecessary to say that this is a purely English custom.

Medical Theses.—The *Louisville Medical News* states that the Medical Department of the University of Louisville have decided to abolish the requirement of theses from candidates for graduation.

Swallowing Artificial Teeth.—Two cases of this accident have been recently reported in the English journals.

Floating Kidneys.—Dr. J. Wickham Tegg, of London, wants information concerning cases of floating kidneys.

The Alumni Association of the College of Physicians and Surgeons held their eighteenth annual meeting on the evening of February 23, in the College Hall, corner of Fourth avenue and Twenty-third street. The retiring President, Dr. Alfred S. Purdy, was in the chair, and opened the proceedings with the delivery of his address. He lucidly and tersely explained the circumstances attending the collapse of the effort to unite the college with Columbia College. The proposal, when first made by President Barnard, had found great favor in the eyes of the counsellors and trustees of the medical institution, as they had been for years endeavoring to raise a fund of $100,000 for the endowment of a chair of pathological anatomy, and expected great pecuniary assistance as the result of such a union. But the endeavor had failed, and the Alumni were now compelled to trust to their own exertions. It was never contemplated that they should raise this large sum by their own unaided efforts, but it had been justly considered wise to attempt to raise as much as they could, say about fifteen thousand dollars, and then to make a public appeal. About five thousand dollars had been subscribed, and the McClellan legacy would give them about fifteen thousand dollars more, so that they were now in a condition to renew the efforts which had been abandoned when it seemed probable that all which they desired to accomplish would be done for them by Columbia College. At the conclusion of the President's speech the usual routine of business was entered into, and all the reports were read. Then came the work of renewing the organization by the appointment of fresh officers, and this resulted in the following officials being chosen: President, W. H. Draper, New York; Vice-President, Alexander Dougherty, Newark, N. J.; Secretary, George Bayles, New York; Assistant Secretary, C. S. Bull, New York. There was no balloting for the office of Treasurer, as the appointment is conferred by the Trustees. After the nominations had been adopted, the meeting adjourned to the 29th inst., when the Alumni dinner took place.

Small-Pox Hospitals in Montreal.—We learn from the *Canada Medical and Surgical Journal* that two small-pox hospitals have been established in that city, one for the French (Catholic) and the other for the English (Protestant) people. Dr. La Rocque is physician to both these institutions, much against the wishes of the British Canadians, who prefer Dr. Dugdale, the health officer. The latter gentleman declines to serve, and thus the matter stands.

Nulliparous Uterus.—The diagnosis of nulliparous uterus is still under discussion, and the Obstetrical Society of London have appointed a committee to investigate and report upon the whole subject to the Society.

French Senate.—Four medical men have been elected members of the newly constituted French Senate.

Toothache.—Dr. J. Sawyer (*Practitioner*) cures this troublesome affection with tincture of gelseminum in fifteen-minim doses, every six hours.

Nursing.—A Metropolitan and National Nursing Association for providing trained nurses for the sick poor has been inaugurated in London. Five ladies are already working in connection with the Association, and go from house to house dispensing their Good Samaritan offices. Being under "distinguished patronage," a British contemporary thinks that the Association will be a success.

An Artificial Ice Rink has been constructed in Chelsea, England, by Dr. John Gamgee, the distinguished veterinarian. The ice is produced by the rapid evaporation of ether. This latter is accomplished by an air-pump, worked by a powerful engine. By an appropriate apparatus the ether is afterwards condensed, and can be used over and over again in the same way. With the exception of the steam-engine, the whole apparatus is automatic.

The London Medical Examiner.—We understand that the programme determined on by the proprietor of the *London Medical Examiner* was too independent and radical for Dr. Milner Fothergill, who had been engaged to act as editor, and that since the second week of the appearance of the *Examiner*, Mr. Oakley Coles, the author of "Deformities of the Mouth," and the editor of the *Monthly Review of Dental Surgery*, has become both proprietor and editor.

Treatment of the Insane in America.—Dr. John Charles Bucknill, the well-known British alienist, writes a letter to *The Lancet* (Feb. 2), defending the treatment of the insane in America, in answer to a recent editorial on that subject in that journal.

Diseased Pork.—A pork butcher of Bradford (Eng.) was recently committed to prison for digging up the carcasses of pigs which had died of typhoid fever, and exposing them for sale.

The Washington University School of Medicine, Baltimore, held its ninth annual commencement at Ford's Theatre, Feb. 24, 1876. The degree of doctor of medicine was conferred upon thirty-two graduates. Dr. W. C. Kloman, Professor of Anatomy, delivered the address. The exercises were enlivened with appropriate music.

New York Eye and Ear Infirmary.—The fifty-fifth annual report, for the year 1875, has just been published. During the period mentioned nine thousand four hundred and fifty-seven patients have been treated in the institution, classified as follows: Diseases of the eye, 6,574; of the ear, 2,315; of the nose and throat, 568. The average daily attendance was 120; of these three-fourths of the cases were for eye diseases. A statistical report of forty cataract operations, performed by the surgical staff, Drs. Noyes, Althof, Eno, Derby, Cutler, Bull, and Callan, has been compiled by Dr. W. Oliver Moore, Resident Surgeon, and is a very instructive and suggestive document.

College of Physicians and Surgeons.—The commencement of this institution took place March 1, at Steinway Hall. A full report of the same could not be prepared in time for the present issue.

Weekly Bulletin of Medical Societies.

Monday, March 6.—New York Neurological Society. Pathological Society of Brooklyn.

Tuesday, March 7.—N. Y. Obstetrical Society, N. Y. Dermatological Society.

Wednesday, March 8.—New York Pathological Society.

Thursday, March 9.—New York Laryngological Society.

Friday, March 10.—N. Y. Medical Journal Association. Peri-nephritic abscess in children, by Dr. V. P. Gibney.

Saturday, March 11.—New York Medical and Surgical Society.

Original Communications.

DIPHTHERIA.

CONDENSED FROM LECTURES DELIVERED IN JEFFERSON MEDICAL COLLEGE, ON MAY 13TH, 17TH, 20TH, AND 24TH, 1875.

By J. SOLIS COHEN, M.D.,

LECTURER ON LARYNGOSCOPY AND DISEASES OF THE THROAT AND CHEST.

TREATMENT.

IV.]

Topical measures can only be effectual when they can be thoroughly applied to the entire exudative product; and their use, therefore, is chiefly limited to manifestations that are accessible to vision. It is generally deemed inexpedient to resort to forcible removal of the membranes, although it is considered allowable when they are partially detached at their edges and but slightly adherent. Some practitioners, however, not wishing to limit the action of the caustic or astringent to the membranes, and doubtful of its action through them upon the mucous membrane beneath, remove the patches forcibly, and then cauterize the bleeding surfaces. The difficulty of effectual topical applications is often very great, and frequently insurmountable, especially when the deposit occupies the upper pharyngeal walls, the internal nasal outlets, the posterior surface of the palate, etc., localities requiring the artificial aid of mirrors to inspect them. Besides this there is great danger of injuring healthy tissues, and thus exciting inflammation, with perhaps effusion beneath the mucous membrane. In addition to this, in certain cases the operation causes a good deal of pain, as well as intense physical and mental suffering, and often interferes in this way with the adequate introduction of nourishment and stimulus, particularly in nervous subjects. It is questionable, therefore, whether it is justifiable to persist in making the applications by force in cases where the resistance is great, and where the outskirts of the visible deposit are out of reach.

If there are but a few circumscribed patches steadily extending in circumference, and fully within reach of instruments, there can be no valid objection to a single thorough local application, in the hope of arresting their progress by continuity. Should this fail, it is hardly likely that anything is to be gained by its repetition. In employing this method we need not forget that the first deposit is likely to be replaced by others; and we are entitled to remember, on the other hand, that this is by no means universally the case, and that therefore there is a possibility of getting rid at once of the local source of danger by a thorough topical application. Of all the local agents that I have employed, and seen employed by others, the tincture of the chloride of iron has been by far the most efficacious. It is believed that aqueous solutions of iron are not as useful as the tincture; and this leads to the inquiry whether its local action may be in any measure due to the alcohol; bacteria are said to be inevitably killed by immersion in absolute alcohol;* and it may be worth while to determine whether the organisms present in the diphtheritic exudation may be destroyed by its local application. Tincture of the chloride of iron, first recommended by Dr. Heslop, of Birmingham,† and by Gigot and Jodin,‡ is at present the favorite topical remedy with most practitioners.

Jodin‡ believes that it penetrates the vegetation completely, limits its action on the surface, and may be absorbed without danger; that it modifies the hemorrhagic condition which constantly surrounds the points of exudation, and provokes a desire to expectorate which facilitates the expulsion of the morbid products. He calls attention to the necessity of exerting a certain amount of pressure in its application, as a liquid simply coursing over the parts can have but an uncertain action; and to the necessity of reaching the entire exudation, as a point spared may be the source of a new deposit. He recommends gargling after the application, and repeating both processes until all is removed. For the nares syringing does instead of gargling. The proper amount of pressure cannot be exerted in the larynx, nor the circumspection exercised to touch every part. Here Jodin recommends tracheotomy and the application of the iron up and down through the artificial opening.

There is but little doubt that this remedy is employed with more general confidence in its efficacy than any other local agent.

The sulphate of iron (Monsel's salt) in powder has been found the most efficacious remedy by some practitioners.§

Hydrochloric acid, extensively employed at one time by Bretonneau, Trousseau, and others, is rarely used by the active practitioners of the present day. The same remark applies to the local use of nitrate of silver, and likewise of calomel, once highly extolled by Trousseau as a powerful modifier of the diphtheritic inflammation.

Hydrochloric acid was employed locally by Bretonneau before he recognized the nature of the disease, and still deemed the diphtheritic aspect of parts denotive of sphacelus.‖ He applied the strong acid at intervals of twenty-four to thirty hours, and believed that it arrested the progress of the specific inflammation by substituting another. The fumes of hydrochloric acid were first employed in the disease in Bretonneau's time, but their use has been abandoned.

Trousseau, likewise, also employed the fuming hydrochloric acid, applied on charpie, repeated twice a day, expecting such modification of the parts after two or three days' use as to justify the application of less active agents. He also employed the concentrated solution of chloride of iron, but abandoned it again for the muriatic acid.

Nitrate of silver is a local remedy that has been extensively employed, and was first recommended by Dr. Mackenzie, of Glasgow¶ as a substitute for the sulphate of copper. Its use has been highly recommended by Bretonneau, Trousseau, and many others. Jenner states** that the single efficient application of a solution of twenty grains to the drachm of water, frequently stays the spread of the exudative inflammation, and he has seen the same result from the solid stick carefully applied around the patch; though he believes that on the whole hydrochloric acid and water in equal parts more frequently attain that object. He reprobates, however, the repeated application of these

* Bastian and others.

† Med. Times and Gazette, 1858, p. 572.

‡ Gaz. des hop., 1858, pp. 559, 586.

‡ De la nature et du traitement du croup et des affections couenneuses. Paris, 1859, p. 32.

§ Beardsley; Slade on Diphtheria, Phila., 1861, p. 70. Swinburne, N. Y. Med. Jour., Jan., 1874, p. 84.

‖ Op. cit., p. 12, Case 2.

¶ Edinburgh Med. and Surg. Jour., 1825, p. 291.

** Op. cit., p. 69.

trong local remedies at short intervals. The solid stick, in a holder so guarded that only the cauterizing point is exposed, or strong solutions of the crystals, are alike used for this purpose. Of late years this agent has lost much of its repute in these cases.

Powdered alum was used by insufflation as long back as in the practice of Aretæus,* and successful results in the early stage of the pharyngeal exudation have been reported by Bretonneau, Trousseau, Pommier, and many others. Fifteen grains, mixed with sugar, are propelled on the parts by an insufflator, or blown upon them through a quill or other tube, every three or four hours. Daviot† speaks highly of it in the first stage as generally preventing the formation of membranes. I do not think that it is much used at present.

The local application of powdered sulphur has been highly lauded, especially by Spanish authorities, for its destructive action upon low organisms. There seems to me to be ample reason to acknowledge its efficiency in certain epidemics that have been reported, or, at least, its equality with other topical agents. In other epidemics, again, it is said to have been useless.

Where topical applications by the brush and probang are injudicious or impracticable, local medications by the gargle, syringe, or spray douche are often resorted to. Here solutions of alum, borax, chlorate of potassium, lactic acid, carbolic acid, sulphurous acid, lime, bromine, glycerine, and the like are employed. The stronger caustic and acid solutions are not suitable for this method of employment. Simple water, hot, tepid, or cold, as best suits the patient, impregnated with Cologne water or toilet vinegar, is a grateful application in the form of douche or spray, and often as apparently efficacious as solutions more medicinal. When the exudation occupies the larynx and trachea, topical remedies are most suitably administered by inhalations. Direct cauterizations of the larynx and trachea are still occasionally practised, but the method has been almost universally abandoned as hazardous and ineffectual. Insufflations of alum, calomel, etc., are rarely employed at the present day either. That the local application to the larynx and trachea of nitrate of silver, so highly extolled by Bretonneau, Green, Gibb, and others, has been of great use in some instances, there is no reason to doubt. But it may be doubted whether any special beneficent action is to be attributed to the nitrate of silver, for many indifferent substances employed in the same manner have likewise proved successful in individual cases. It is likely that most of the benefit has been due to the mechanical detachment of the membrane removed, or merely loosened by the contact of the sponge in the execution of the operation. A sponge saturated with water, or with a weak solution of carbolic acid, or the like, would then be equally efficient, and be much less apt to produce intense spasm of the glottis. By placing the index finger of one hand upon the laryngeal face of the epiglottis, it is not very difficult to carry a sponge probang along the guide into the larynx, and by suitable movements to reach most of its interior surface, or that of the trachea, and if it come in contact with membranes they will be removed in part adherent to the sponge, and will be in part detached and expelled subsequently in the efforts of cough.

In cases where tracheotomy is out of the question, or where it will not be consented to, it may be justifiable in the face of impending suffocation from accumulated products to attempt their mechanical removal in the manner indicated, the operation being completed in as few seconds as possible. There is a moderate risk of impacting membranes in the trachea or in the primitive bronchi, a result which would accelerate the very condition for the alleviation of which the operation is attempted; but such instances would ordinarily be very infrequent. On the other hand, removal of obstructing membranes will facilitate respiration for some time, and may save life if there be no reproduction of them. The responsibility of performing the operation is great enough in any instance; and in case of impaction, immediate tracheotomy would be necessary.

The agents administered by inhalation are usually such as have a solvent action upon the morbid product or keep it diffluent so as to favor its expulsion by cough. Various alkalies have a certain solvent action upon the membrane. Lime-water is the most efficient and promptest, and is at present the most resorted to. Iodine, chlorine, bromine, creasote, carbolic acid, salicylic acid, sulphurous acid, and lactic acid are used for the same purpose. With sulphurous acid I have had some successful results. These agents are usually admininistered in the form of sprays.

Bromine vapor has been highly recommended by various observers. Ozanam throws a large pinch of table salt or of bromide of potassium upon boiling water, and adds gradually a teaspoonful of an aqueous solution of bromine, a drop to the ounce. The vapor is inhaled slowly and deeply through a funnel of glass or paper. Leuthlen saturates a sponge in a solution of two parts each of bromine and bromide of potassium in one hundred parts of distilled water, and holds it before the patient's nose and mouth, much in the same way as administering an anæsthetic.

The vapor of ammonia has been recommended to excite vomiting and expectoration.

Tracheotomy.—When there is such evidence of false membrane in the larynx and trachea as to threaten suffocation or asphyxia, and emetics and inhalations fail to effect its expulsion, the operation of tracheotomy is indicated to enable removal of the membrane in the first place, and respiration through an artificial opening, below the point of obstruction, in the second. If the membrane should occlude the bronchi to any extent, there is little to hope from the operation; but this condition is very difficult to determine, on account of the transmission of morbid sounds from the upper passages. The most reliable indication is continuous and increasing dyspnœa with gradual asphyxia, but unaccompanied by incurvation of the tissues above the sternum, or to any considerable extent at the base of the thorax, or in the intercostal spaces. If the tissues named are drawn in to any great extent with each inspirating effort the indication is that the impediment is chiefly in the larynx or trachea, and much more is to be expected from the operation. Great stridor in inspiration indicates obstruction at the glottis. It is not expedient to go fully into a consideration of all the points involved in the question of tracheotomy, as that is a subject that requires a careful study of itself. In a recently published essay,* to which I may without undue pretention refer such of you as are interested in the subject, I have carefully gone over the subject in all its important bearings, and presented the *pros* and *cons* as impartially as I am able to do. It will suffice to state that the operation has been successful in many cases apparently hopeless, and promising but

* Bretonneau, op. cit., p. 42.
† Memoirs, etc., Sydenham Soc., p. 371.

* Croup in its Relations to Tracheotomy, Philadelphia, 1874.

little success. On the other hand, it often fails even in promising cases. Much depends on the selection of cases, the proper performance of the operation, and on the after-treatment. There is no insuperable contra-indication to the operation, unless it be evidence of the deposit of fibrin in the cavities of the heart. Anæsthesia is admissible, if sensation is intact, but must be employed with great caution. The operation must be deliberately performed unless the emergency is such that the patient is sure to suffocate during the dissection. As a rule, hemorrhage should be restrained before the trachea is incised. The false membranes present in the larynx and trachea should be removed by extraction and suction (with syringe or with pipette), before any tube is introduced. Finally, the most assiduous attention must be paid to the after-treatment, as regards disease, wound, and tube. The tube should be dispensed with if practicable, and should be removed as soon as there is no further indication for its use. Above all must it be kept in mind that the operation merely offers a possibility of recovery by affording a means of efficient respiration during the continuance of the disease. It will help the patient to live through the evolution and decline of the disease, but it cannot cure it. It is a chance for life which should not be denied the patient, if the conditions are such that it can be properly attended to afterwards; and the sooner the operation is performed after it is indicated, the better the hope of success. The operation is rarely successful in adults, chiefly because the size of the larynx is such that the mechanical impediment to respiration is not sufficient to call for an artificial opening below it, until after the exudation has invaded the bronchi. I know of but three or four records of success after tracheotomy in the adult, while the records of success in children may be counted in hundreds, some of them in subjects much less than two years of age, although success is very rare at this early period of life. The main indications, after the operation, are to keep up nourishment to sustain the patient, and to encourage or to provoke cough, to keep the air-passages clear. All treatment should be subservient to these ends, so essential for a favorable termination to the case.

The manner in which I have become accustomed to treat diphtheria, modified of course according to the exigencies and individualities of the case, may be stated as follows: The patient is placed in the most convenient room of the house, encumbered with as little furniture as practicable, care being taken to provide for due ventilation and an equable temperature of 75 F. Great attention is given to nourishment, and to systematic alcoholic stimulation, when the strength is becoming exhausted. The nostrils, when clogged, are assiduously cleaned by douche or syringe. Tincture of the chloride of iron is given in full and frequent doses, and applied locally to any circumscribed patches that can be reached in their entire extent. A continuous evolution of steam is kept up in the apartment so as to moisten the air; the throat and nostrils are kept as clean as possible by douches of a weak solution of carbolic acid (two grains to the ounce), and the same is occasionally administered by inhalation in spray. As soon as there is any evidence of morbid product in the larynx, or parts below it, inhalations of the fumes from lime in process of slacking * are administered for ten or fifteen minutes at a time, and repeated every second hour, hour, or half-hour, according to the freedom of respiration and the moisture of the bronchial râles. I give the vapor from slacking lime the preference over inhalations of the spray of lime-water, though I have seen good effects from the latter, and sometimes alternate the two methods. If the lime does not appear to suit the case, or if its good effects are not continuous, inhalations of the warm spray of bromine, a grain to the ounce of water, with a grain of the bromide of potassium, are substituted. Should these likewise prove inefficacious I use the sulphurous acid spray. If the laryngeal symptoms increase, and asphyxia is to be dreaded, I advise tracheotomy as soon as there is marked inspiratory incurvation of the intercostal, substernal, and suprasternal tissues, without waiting for the period of cyanosis, provided that no respite is procured by the inhalations, or by the action of emetics.

I am inclined to regard saturation of the atmosphere with steam † as one of the most valuable elements of the treatment of diphtheria in the presence of exudation in the air-passage; the object being to supply to the exudation an abundance of water to replace that which is lost by evaporation or coagulation in its transformation into membrane, and thus favor its detachment and expectoration. With this view I often keep up a continuous evolution of steam so great as to loosen the wall-paper in papered apartments.

Oertel,‡ a recent authority of some notoriety, places his main reliance in this agent in the treatment of diphtheria in the stage under consideration, with the view of promoting abundant suppuration beneath the adventitious membrane to loosen it, and preventing the propagation of the cryptogamic growth, which he states cannot penetrate into the tissues through the layers of pus.

There are a variety of expedients for obtaining a sufficient evolution of steam. If there is a stove in the room, a vessel of water containing small articles, such as handkerchiefs and napkins, may be kept boiling. If this be insufficient, wet cloths may be hung up about the room and be changed from time to time. A wash boiler may be brought into the room, already filled with boiling water, and an attendant stand by it lifting out articles of clothing on a stick, and then immersing them and lifting them again, keeping it up all the time. A second vessel should be ready to replace the first one as soon as its water fails to furnish sufficient steam. Buckets of water may be brought to the bedside, and hot bricks or bits of heated iron dropped into it. Water may be poured over a hot shovel now and then to get up a sudden copious evolution of steam for the moment, and so on. A tin kettle may be altered so that a long wide spout is let into its side high up, to direct the steam towards the mouth of the patient, and can be fed by an alcohol lamp or one of the cheap gas stoves in common use in cities. If a funnel-shaped tube is soldered into the cover so as to dip down into the water, the supply of steam will be more copious. This croup-kettle is inexpensive, and may replace the more perfect instrument. The air of the apartment should be kept well ventilated by an open window in an adjoining room or staircase, a screen formed by a sheet hung over a line being placed in front of the door of communication, or around the bed to screen the patient from draught. If the room is large, the bed may be brought close to the stove, and sheets may be hung round it so as to retain the steam in its vicinity. The temperature of the apartment may be maintained at 80°, 85° or even 90° F. This steaming is kept up

* Geiger, Med. and Surg. Reporter, Phila., March 24, 1866.

* Wunder: Du Croup et de son traitement par l'eau salée, Paris, 1831.

† Ziemssen's Cyclopædia, New York, vol. ... p. 475.

night and day as long as there is any occasion for it, the amount of heat and steam being then lessened gradually.

In order to assist in the early destruction of the membranes, and to afford inlets through them for the penetration of the watery vapor, I resort to the vapors of slacking lime as recommended by Dr. Geiger, repeating the process every hour or so, or whenever the character of the respiration indicates impediment due to the presence of membrane or its reproduction. Hot water is poured upon small pieces of unslacked lime in any convenient vessel. A large piece of stiff wrapping paper, folded into a funnel-shaped cone, or a stiff paper bag with one corner cut off, and inverted over the vessel serves to direct the vapor towards the mouth of the patient. The patient must not be brought too close to the hot vapor, and his eyes may be protected by a cloth or the hand of the attendant. The ebullition of the lime in slacking forces numerous minute particles up in the steam that rises from the vessel, and are taken with it into the air-passages. It may be that the lime does not act chemically on the membranes, and merely wedges them up mechanically here and there, permitting better access of the aqueous vapor; but that it acts beneficially in forcing the expulsion of shreds of membrane, casts, and the like, there is no doubt.

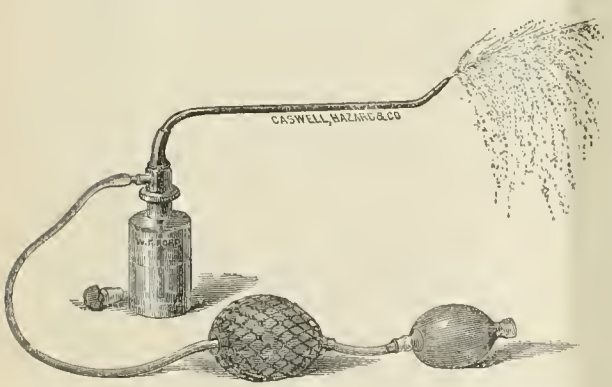
This treatment is likely to induce a catarrhal pneumonia, but if it saves the patient from the immediate dangers of suffocation, that is a secondary matter to be attended to subsequently. I have seen numbers of children saved by this treatment, who, to the best of my judgment, would have perished without it; some of them being cases in which it was believed that tracheotomy held out no chance of a successful termination.

THE SPRAY TREATMENT FOR INFLAMMATIONS OF GENITO-URINARY TRACT.

By E. BRADLEY, M.D.,

NEW YORK.

In a paper which I read before the New York Medical Journal Association, a year ago, I called the attention of the profession to the use of "the spray"



in the treatment of inflammations of the bladder, vagina, and womb, and presented an instrument which I devised, and had been using for some time in the treatment of those diseases.

Since that time I have used the instrument very extensively, and have found it of so much service that I again take the liberty of bringing it before the profession, in the hopes that they will be induced to give it a trial, feeling confident that *all* who use it will find this means of medication infinitely superior to the uterine probe (armed with cotton) the use of injections, glass tubes, and *all other means of intra-uterine application*. By its use we are enabled to reach every part of the uterine cavity, and bring our medicated substances to bear directly on the mucous membrane.

My plan has been to first spray the uterine cavity with tepid water, after which I use solutions of iron (sesquichloride), iodine, carbolic and salicylic acids, of different strengths, as the cases may require, adding to the solutions a little morphine where an *unusual* amount of tenderness exists.

During the past two years I have had the satisfaction of seeing many obstinate cases of cystitis and endometritis yield to the use of the medicated spray, after resisting many other modes of treatment, and I have never yet experienced, in using it, any inconvenience from uterine spasm or excessive pain.

The instrument is made of vulcanized rubber (capable of resisting the chemical action of any substance which one would be likely to use in the cavities of the bladder and womb). It is made like the ordinary spray instrument, with the addition of a *long arm*, properly curved, to enter the cervical canal, and to pass into the bladder, and if displacements of the womb are met with, the curve can be changed to the proper angle to suit the case by heating.

The accompanying wood-cut gives a good idea of the instrument I am now using.

Many cases might be given in detail illustrating the happy effects of this mode of treatment, but I will leave that for some future article, in the hopes that this will suffice to induce my professional brethren and all progressive gynecologists to give it a trial.

Before closing this article, I desire to add that I have found it necessary in some cases of cystitis (where the bladder was very sensitive, and its walls much thickened from inflammation), to use the spray very sparingly, and to meet such cases I am having an instrument constructed (similar to the one described in the accompanying wood-cut) with the addition of a channel or groove, so as to admit of the exit of all the air from the bladder, thereby relieving the tension of its walls

1 W. 24TH ST., NEW YORK.

BRITISH ARMY MEDICAL DEPARTMENT.—One of the proposed measures of reform and amelioration of the Army Medical Department of Great Britain is likely to take the form of what is called short service. Medical students, as soon as they have obtained the necessary licenses to practise medicine and surgery, will be invited to compete for positions in the army on the understanding that they will only be required to serve in it for a limited period, say ten years, at the end of which time they will be free, or rather be required to retire. A certain bonus, the amount of which is not settled, will be given them on retirement. This arrangement, while it may help the government in filling vacancies, and will do away with the retirement on pensions, will very seriously weaken the service by depriving it of the skill and experience of the old army medical officers in the administrative departments. It is probable, however, that some modification in the general plan will be made to remedy this difficulty.

Original Lecture.

GALVANISM IN SKIN DISEASES, NÆVUS, FAVUS, PHLEGMONOUS SCROFULIDE, PEMPHIGUS, MOLLUSCUM CONTAGIOSUM, ETC.

BEING A CLINICAL LECTURE DELIVERED FEB. 7, 1876,

BY PROF. HENRY G. PIFFARD, M.D.,

UNIVERSITY OF THE CITY OF NEW YORK.

(REPORTED BY DR. GEO. H. FOX.)

GENTLEMEN:—As this is the last opportunity I will have of addressing you before the close of the winter session, I cannot let the occasion pass without asking your attention to a certain physical force which may sometimes render efficient service as a remedial agent in connection with diseases of the skin, as well as those of other parts of the body. I refer to galvanism. This agent may be used in five different ways in the treatment of disease, and with results varying with the manner of application. In two of these the galvanism is employed indirectly, in three directly. In the former it does not enter into or modify the tissues, but induces other phenomena which are then employed remedially. In the latter it does enter the body and directly affects the parts. These applications are:

1. To excite an induced electrical current in a coil of wire surrounding a temporary magnet (*indirect*).
2. To produce *catalysis* (*direct*).
3. To produce *electrolysis* (*direct*).
4. To produce *coagulation* (*direct*).
5. To produce an intense heat in a small piece of platinum or other metal (*indirect*).

The nature and effects of the induced electrical current have already been fully explained by one of your other teachers, and need not detain us at present. The other four applications of galvanism I shall allude to but briefly, and simply to explain them, in order that you may obtain a clear idea of the fundamental principles which underlie the employment of this agent, and the kinds of phenomena which it is capable of producing. Attempt at detail would trench too deeply upon the time at our disposal.

By *catalysis* we mean a modification of nutrition. If the current from a galvanic battery, composed of a number of cells properly joined, be passed through the body by means of moistened sponge-covered rheophones applied to the surface, we may in one instance, by stimulating the nervous system or the circulation, exalt the vitality of parts in which it is depressed; in another instance we may subdue pain; in a third, remove pruritus; in a fourth, hasten the resolution of an inflammation; in a fifth, reduce an infiltration; and in a sixth, cause the partial or total disappearance of a tumor. These are all effected by modifications of the local nutritive processes, whereby absorption is rendered more active, and normal action supplants the pathological. As these changes are effected slowly, it will be impossible for me to give you a demonstration of them.

By *electrolysis*, on the other hand, we mean the direct decomposition and destruction of tissue elements, and of the fluids which surround them. The simplest illustration of the electrolytic effects of the galvanic current is the decomposition of saline solutions. If, for instance, the current be passed through a solution of iodide of potassium, this compound, as well as the water, is split up into its component elements. By looking at the screen (a magic lantern was arranged with a glass cell containing a dilute solution of potass. iod. at its focus; into this were introduced wires connected with the poles of a battery) you will see, the moment the current passes through the fluid, an active change occurring in the solution. At one wire we see a brownish discoloration, at the other the development of numerous bubbles. Oxygen, acids, and similar bodies collect in the neighborhood of the positive pole; hydrogen, alkalies, and basic substances at the negative. In this instance the oxygen, resulting from the decomposition of the water collecting at the positive pole, rapidly oxidizes the metal of which the wire is composed; the free iodine, also collecting at this point, discolors the solution in the neighborhood. At the other pole the potassium is free, but, being readily soluble, is unperceived; while the hydrogen, unable to combine with the wire, escapes in the form of little bubbles. If now, instead of dipping the wires into a saline solution, they are plunged directly into the body, the same phenomena will occur, and the tissues and fluids in their immediate neighborhood will in like manner be split up into their elements or into simpler compounds. As the tissues, however, are very complex in their composition, additional phenomena occur. These are, first, an appreciable elevation of temperature in the wires, which effects a slight cauterizing action upon the parts; and second, at one of the poles a slight tendency to the coagulation of albuminous and fibrinous substances. This latter effect is readily demonstrated. If you again look at the screen (the cell containing the potash solution was replaced by one containing albumen, and the wires adjusted as before) you will see, when the circuit is closed, that bubbles of hydrogen appear at the negative wire, but at the same time the positive wire is becoming surrounded by a dense mass of opaque material, which in this instance is coagulated albumen. From this we see that *electrolysis* is most active at the negative, and *coagulation* at the positive pole. Electrolysis enables us to destroy morbid growths, and coagulation enables us to occlude vessels by the formation of clots. The particular indications for these uses of galvanism we have not at present time to consider.

The last (*indirect*) application of galvanism is what is known as the galvano-cautery. If a strong galvanic current passes readily through the wire which connects its poles, it does so without creating much disturbance; but if its passage is resisted, heat is developed at the point of resistance. Platinum is a resisting body, and if a small piece of it be introduced into the circuit, it soon becomes red and then white hot (this was demonstrated with a small cautery battery). This heated platinum may then be used as a counter-irritant, as a hæmostatic, or for the destruction or removal of morbid growths. The other day you were shown a tumor which I had removed in this manner. I will now show you a photograph of the patient before the operation (the photograph was projected upon the screen about twice the size of life; it displayed an hypertrophied *præputium clitoridis*, which after removal weighed 6½ ounces). We must now leave the subject of galvanism, and give our attention to the patients who are waiting in the ante-room.

CASE I.—The first one (a man aged 45 years) is one whom you will recognize as a former case of Eczema. To-day he desires the removal of a small Nævus just beneath his left eye. This may be effected in a moment by the introduction of a couple of needles con-

nected with the poles of the battery (this operation was then performed). We have now destroyed most of the enlarged vessels, and coagulated a portion of the blood. In a few weeks there will be but a slight trace of the nævus; in a few months it will be impossible, perhaps, to discover its former site. This application of the galvanic current is one of the most effectual and convenient methods of treatment in this affection. I cannot detain you with further remarks concerning nævus, as we have to-day an unusual collection of rare and interesting cases, some of which I may never again have an opportunity of showing you.

Case II.—A boy, 18 years of age. Four weeks ago I showed you a case of Favus of long standing, and in connection with it an ordinary house mouse affected with the same disease, and which had been given me by my friend Prof. Keyes. The present patient is another case of Favus, of two years' standing. As the nature and treatment of this disease was fully considered the other day, I shall not repeat what was then said, but will simply present the case to you for inspection, and at the same time pass around a cage containing a white mouse, which I placed in a cage with the other one a month ago, and which has contracted the disease from it, and exhibits some favus crusts within the right ear. Remember that this disease is not only contagious from one human being to another, but it may also be conveyed from mice to cats, and from cats to children who play with them. It is important, therefore, that you should be able to recognize the disease in the lower animals as well as in man.

Case III.—A girl, aged 23 years. Last week we had a case of Erythematous Scrofulide (*lupus erythematosus*), but this one is a phlegmonous scrofulide, and presents itself as a small, bluish red tumor upon the left side of the nose. The tumor is oval, and about half an inch in length and a quarter in breadth, and looks like a small abscess ready for opening. It is, in reality, a dermic phlegmon, but, instead of being soft and fluctuating, is firm and hard. The course of these lesions is chronic, and their progress exceedingly slow. It may be weeks or months before they soften and suppurate. When this occurs, a tedious ulcer, discharging a thin, ill-conditioned pus is the result, with finally an indelible scar. These lesions are, without question, scrofulous manifestations, and demand a constitutional treatment adapted to this condition. The indications for local treatment are, in the early stages, to procure resolution, if possible. This may sometimes be accomplished with mercurial and iodic applications. If softening, however, has occurred, the pus should be aspirated with a hypodermic syringe, and a drop or two of dilute iodine afterwards injected.

Case IV.—A man, aged 40 years, with Pemphigus. This is a disease always characterized by an eruption of bullæ, but under the same name have been included a large number of cases, varying greatly in respect to nature, course, and cause. For instance, the name has been applied to an affection of young children, in which a bullous eruption occurs and runs an acute course; to a bullous eruption affecting infants who are the victims of hereditary syphilis; and to various anomalous eruptions characterized by the presence of bullæ. I prefer limiting the term Pemphigus to a certain chronic relapsing affection of adults, of which the case before us is a striking example. This case, which had been diagnosed as syphilis, was undergoing the usual specific treatment, and passing from bad to worse, when he first came under my observation. Under the influence of arsenic, a marked improvement in his condition has become manifest.

Case V.—This man presents a tolerably common and often obstinate affection of the beard known as Sycosis or "barber's itch." It is an illustration of the non-parasitic variety, being due to a simple inflammation of the hair follicles, and hence presents a contrast to the cases of ringworm of the beard which you have seen, and in which the eruption results from the presence of a vegetable parasite, the *tricophyton tonsurans*. The treatment is nearly the same as in the parasitic affection, namely, epilation, followed by the white precipitate ointment.

Case VI. is an infant exhibiting that very common affection eczema of the face. In this case a proper diet, with the administration of syrup of the iodide of iron and cod-liver oil, and topical application of any emollient ointment, will speedily effect a cure.

Case VII.—I have now the pleasure of exhibiting to you an extremely rare and interesting affection of the skin known as Molluscum contagiosum. The boy is a patient of Dr. Fox, to whom we are indebted for this opportunity of studying the affection. Scattered upon the breast and back you notice a number of button-like elevations rising abruptly from the surrounding skin. They are seen to be small, flattened pouches of skin, containing a white, semi-solid, cheesy matter, which may be seen exuding from a central orifice when pressure is made upon the sides of the little tumor. Some of them are slightly umbilicated, like the mature pustules of variola, to which they bear no small resemblance. The nature of this affection is very obscure, and its contagiousness has been the subject of dispute. And now, as I have already trespassed upon your time, I will merely ask you to observe this case very closely, that you may readily recognize it should you ever have the opportunity of seeing a similar one. The treatment consists in squeezing out the contents of the little tubercles, and applying nitrate of silver freely to their interiors.

Progress of Medical Science.

When we May and When we May Not Bleed.—Dr. Henry Moon thinks that the indiscriminate use of blood-letting, years ago, destroyed many thousand lives annually. In some cases, however, with the light of modern science, it is still a remedy of great practical usefulness. In cerebral hemorrhage, if the impulse of the heart be strong and its sounds loud, if the pulse be regular and no signs of œdema of the lungs exist, the patient should be bled without delay. Here a judicious timely bleeding may prevent the extension of the paralysis from the cerebrum to the medulla oblongata. The patient may not be bled, on the contrary, when the heart's impulse is weak, the pulse irregular, and rattling in the trachea has already begun. In acute croupous pneumonia bleeding may be beneficial when the pneumonia has attacked a vigorous and hitherto healthy person, the temperature being higher than 100° Fahr., and the pulse rating at more than 120 beats in a minute. In those, however, who are already debilitated, bleeding increases the danger of exhaustion. Should the fever in pneumonia be moderate, venesection is not indicated, even in healthy and vigorous individuals. The result of a bold venesection in fluxiou of the lung, arising from excessive

cardiac action, is astonishing. As soon as the volume of the blood has become lessened, the pressure diminishes in the arteries, the patients often breathing more freely during the operation. The bloody foam which they were expectorating vanishes, and life may be rescued from the greatest danger by aid of the physician. Bleeding should never be used in cases of long standing disease of the heart, except under the most pressing circumstances. In endocarditis bleeding is decidedly injurious, yet at times a condition exists, such as overcharge of the pulmonary circulation, threatening œdema of the lungs, when prompt relief by diminution of the blood is demanded.—*British Medical Journal*, January 15, 1876.

Puerperal Fever.—Dr. William O. Priestly, in an address before the London Obstetrical Society, gives especial prominence to the question whether puerperal fever is a specific disease. He thinks that clinical investigation and pathological research have both in recent times been teaching that what has been called puerperal fever or fevers are but forms of blood-poisoning or septicæmia, similar to those observed in other than puerperal patients, having, it may be, a diversity of origin, and intensified and modified, perhaps, by the peculiarities of the puerperal state; but still they are essentially the same, and do not constitute a pathological genus apart. Dr. Barnes says that the origin of the poison, whatever may be its nature, or chemical composition, has two sources. In the one case the virus is found in the patient's own body, as the result of initial morbid changes in some special part, which effects eventually the rest of the system: in the other case the virus is imported into the body by contamination from without. To the one class of cases he applies the term "autogenetic," to the other, "heterogenetic."

A warm discussion has taken place as to whether puerperal fever is epidemic or endemic. Dr. Mathews Duncan doubts the evidence of its epidemic character altogether. As to the contagious quality of puerperal fever, the direct proofs have accumulated to such an extent that to disregard them would be a plain dereliction of duty on the part of a medical practitioner. —*British Medical Journal*, Jan. 8, 1876.

Rapid Dilatation of the Female Urethra.—Dr. George Jewett relates a case of a girl, 15 years old, who had introduced the handle of a crochet-needle, through the urethra, into the bladder. The foreign body was easily detected with the sound, but it was firmly fixed at both extremities, and any effort to move it caused great pain. Digital exploration of the bladder was then decided upon. Ether was administered, and a No. 16 male sound was introduced, the index finger, well lubricated, following its introduction. A rotary motion, with moderate force, brought the finger to the base of the second phalanx, where further dilatation without rupture seemed impossible. The bladder was empty, and the foreign body easily reached. The lower extremity was two inches to the right of the meatus, and while endeavoring to lift it out of the base of the bladder, a sudden rupture of the meatus occurred. After some difficulty the finger-nail was introduced under the point of the needle-handle, and the finger being gently withdrawn, the vesical contraction forced the intruding body far out of the meatus. There was moderate hæmorrhage, which ceased spontaneously. The patient was put in bed; opiates were given, and fomentations ordered to the pubic region. In two weeks the recovery was complete. Allusion is made to the fact that in such cases Simon advises two incisions to be made in the meatus; one superiorly, of one fourth a centimetre, the other inferiorly, of one-half a centimetre. —*Boston Medical and Surgical Journal*, January 27, 1876.

Amyloid Degeneration of the Muscular Structure of the Heart.—Leonhardi's violet ink, as a test of great delicacy for the amyloid degeneration of tissues, has fully maintained its reputation; and now Prof. Heschl, of Vienna, reports that by its use his assistant, Dr. Breus, has detected this form of degeneration in the vessels and in tissue between the primitive bundles of heart muscle. Prof. H. had never before succeeded in verifying this state of things, although suspecting it to exist. The arteries and capillaries, and also the connective tissue surrounding them, gave the characteristic reaction; and in regard to the muscular elements it was found that the degeneration was manifested in an envelope of homogeneous non-nucleated tissue, which surrounded with a more or less complete envelope one or several of the primitive bundles, while they themselves were unaffected. In this connection, attention is also called to the fact that the heart muscle has no sarcolemma, and thus the amyloid degeneration described above must have involved an enveloping tissue of new formation, and presumably exudative in its origin. Heschl therefore regards this as confirming his views of the origin of the like degeneration in the liver, as opposed to the views of Rindfleisch, who states that it is the liver cells which are the chief seat of the waxy change.—*Wien. med. Woch.*, 2, 1876; *Allg. med. Central-Ztg.*, 5, 1876.

The Fixation of Cochineal Carmine in Living Anatomical Elements.—At the meeting of the *Société de Biologie* on December 11th, M. Pouchet reported the results of the following experiments: A tablet of fine carmine was dissolved in water to the consistence of paste, and injected into the lymphatic sacs of eight frogs, a mass equal to about two cubic lines being injected into each animal. In a day or two the leucocytes of the blood were loaded with grains of carmine, and soon the tendons and fibrous tissues generally became colored by a true imbibition, not by a granular deposit of the carmine. The fibres and cells were both tinged. When acetic acid was added to a fragment of tendon or aponeurosis under the microscope, the fibres swelled and the coloration consequently became less marked, while the cells preserved their color. The nuclei were not more deeply colored than the bodies of the cells. The subcutaneous fascia, the sclerotic, and the non-calcified portion of the dental socket were colored a bright red. The epithelium and the epidermis, the crystalline lens and its capsules, the cornea, the basement substance of the bones and of the cartilages and their cells, and the muscular substance presented no traces of coloration. Even the protoplasm of the leucocytes was not colored, although it enclosed grains of carmine. The nervous elements were entirely exempt from coloration. A notable peculiarity was a light coloration of the external segment of the rods of the retina, which disappeared rapidly on the addition of water or alcohol. This coloration of the rods is remarkable, because after death this layer colors very slowly, while the granular layers do so very rapidly.

In order to explain this fixation of the carmine we must first admit that a small quantity of it was dissolved by the alkaline serum, whence it passed, by reason of special chemical conditions, into certain determined tissues and anatomical elements. It is possible, however, that had the experiments been continu-

used longer, a larger number of tissues would have been affected. The coloration did not seem to be so ephemeral as that obtained with indigo-carmine. The carmine granules disappeared rapidly from the lymph-sacs, having been taken up by the leucocytes, which appeared to be increased in number. During the first few days, no free granules were found in the blood. The red globules contained no granules. The leucocytes charged with carmine accumulated rapidly in the capillary networks of the liver, kidneys, spleen, lungs, and medulla of the bones, giving them a rose color, which was not due to imbibition, but was comparable to that produced by a successful fine injection. If all the capillaries of the body were filled with these leucocytes, of course hæmatosis could not take place, and the animal would die. These observations formally contradict the generally admitted proposition that living bodies cannot take up carmine.—*Gazette Medical de Paris*, Dec. 25, 1875.

Diffuse Phlegmonous Periostitis.—In discussing a paper of M. Duplay in the *Société de Chirurgie*, M. Giraldès endeavored to point out the characteristics of this affection, which he claims is very often mistaken for periostitis, osteitis, or osteoperiostitis. He held it to be characterized by the gravity of the general symptoms, the typhoid aspect of the patient, and the intensity of the fever; locally the suppuration is deep and abundant, and detaches the periosteum to a large extent from the bone. Early resection was said to shorten the duration of the suppuration, and secure the preservation of a healthy periosteum, which can reproduce a bone but little deformed, and without invagination of a sequestrum.

M. Trélat thought it was difficult to distinguish between the different forms of osteitis and periostitis, and that early intervention, though excellent in grave cases, might be dangerous under other circumstances. He held that necrosis is due to suppuration in the Haversian canals. M. Verneuil protested against the idea that separation of the periosteum necessarily causes necrosis of the whole bone, and mentioned several cases where extensive denudation of the shafts of the long bones was followed by the loss of only a few splinters. M. Guyon mentioned the case of a child suffering from diffuse phlegmonous periostitis, who was cured by incisions and drainage.—*Journal de Méd. et de Chir.*, Jan., 1876.

Epilepsy of Thirty-three Years' Standing Cured by Rheumatism.—Mr. Edmund B. Whitcombe gives the history of a female, who came under his observation at the Birmingham Borough Lunatic Asylum in August, 1870. She had been admitted ten years before as an insane patient, the supposed cause being epilepsy. During the first year (1860) she had from ten to twenty fits a month, these chiefly occurring at night. In 1861 she suffered from amenorrhœa, and at frequent intervals, for the following eight years, she had irregular menstrual discharges, at times amounting to menorrhagia. During this period there was a large increase in the number of fits; she became anæmic, and was very feeble mentally. When first seen by Mr. Whitcombe (1870), she was thin, very pale, and complained of frontal headache and palpitation of the heart. Mentally she was depressed, and appeared frightened at trivial matters. Full doses of the tincture of perchloride of iron and a liberal diet were given, under which she improved. In May, 1872, she had an attack of acute rheumatism, which left her in a chronic state of rheumatic arthritis, the wrist and knees being implicated. During the following year (1873) she suffered much, especially from the left knee, which, in the early part of 1874, swelled, became hot, red, and exceedingly painful. Suppuration and partial luxation of the joint quickly followed, and, after consultation, the limb was removed just above the knee. The operation was well borne, and from this time onward she progressed rapidly, and in less than a month was able to sit up; the stump had healed, and her general condition had much improved. In November, 1875, she was in good bodily condition, and free from pain. She was bright, happy, and rational in her conversation, and her memory was improved. There had been no epilepsy, nor any sensation of a coming fit, since June 4, 1872. From the time the patient was admitted (1860) to the time the fits ceased (1872), she had 2,531 attacks of epilepsy, the greatest number in one year being 502. Mr. Whitcombe thinks the most interesting feature in this case is the complete cessation of epileptic fits after an uninterrupted suffering for thirty-three years, and, with that, the return of the mental power. The use of medicines, or any improved bodily condition, cannot be accredited with these satisfactory results. The case presents itself simply as one of metastasis. The epilepsy succumbed to rheumatism, in which, according to Dr. Sieveking, a "genuine blood disease" is not unfrequently followed "by a permanent cure of the epilepsy."—*Journal of Mental Science*, January, 1876.

Specula for Examining the Female Bladder.—At a meeting of the Obstetrical Society of Edinburgh, held July 14, 1875, Mr. Mathews Duncan stated, that he had recently been paying renewed attention to bladder diseases, especially chronic cystitis. He had repeatedly dilated the urethra to a large degree, and found that it relieved the cystic symptoms. Through the urethra so dilated, by Simon's vulcanite tubes, the interior of the urethra and bladder can easily be seen. In order that a thorough visual examination may be made, he now uses common glass specula, three-quarters of an inch in diameter, or larger, with internal mirror surface. They show the inside of the organ, as well as similar, but larger, specula show the vagina and cervix uteri. The whole operation of dilating and examining the bladder, exclusive of the use of chloroform, does not take more than five minutes.—*Edinburgh Medical Journal*, December, 1875.

The Antiseptic Treatment of Empyema.—Dr. Alexander J. Sinclair emphasizes the statement, that the successful treatment of empyema cannot be carried out without permitting the escape of the fluid by means of an opening. Where, by what means, and by what method this opening is to be made, and what treatment is necessary to effect a cure, are the important questions. He thinks it is strange that a fistulous opening is not made at the onset of the disease, and that the patient should be exhausted by previous successive tappings, before nature or the surgeon has established a patent external opening, without which few if any cures can be effected. He then mentions two cases, which were successfully treated, by opening the cavities in the manner recommended by Mr. Lister. The best method for the patient is to make a fistulous opening at once, this method being robbed of its dangers by carefully making the incision, and subsequently dressing the wound antiseptically. Independently of the freedom from danger, the cleanliness and comfort to the patient can only be known to those who have seen the profuse discharge of pus from the ordinary fistulous opening in the pleura, after empyema.—*Edinburgh Medical Journal*, December, 1875.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, March 11, 1876.

SUCCESS IN A CROWDED PROFESSION.

As we have just recruited the army medical with between three and four thousand graduates we have another opportunity for moralizing in a general way on the professional prospects of these new-comers into our ranks. So long as the bugles blow, the drums beat, the bands play, the banners fly, and the commencement addresses are being delivered, there is no end of enthusiasm; and as each young soldier grasps his parchment commission there is that quiet determination to succeed in his future calling, which is simply terrible to contemplate. No doubt a great deal of this is a genuine feeling on the part of the young graduate, and may, with a few, be kept alive long after the music has died away and the tinselled promises of the orators shall have become dimmed by the every-day work of the plodding, struggling, and half-starved practitioner. But even with this few, despite the enthusiasm, anything like brilliant success will, we fear, be the exception rather than the rule. This, it is true, is rather a melancholy background to what would otherwise be a bewitching contemplation for every ambitious youth; but facts are cold, stubborn, and uncompromising, and will have their way.

We know that it is the custom for the professors to hold out brilliant hopes to their classes, and to promise them all sorts of rewards for their labors; but by actual experience, these hopes are seldom if ever realized. The whole trouble lies in the present system of medical education, which, disguise it as we will, is carried on almost solely for the benefit of close corporations, in the shape of medical schools. There is every inducement offered to enter these institutions, large classes are desirable because they pay, and when the end comes the graduate is dismissed with a benediction, to find out too late that their so-called brilliant attainments are really a drug in the market. It is well enough to say that there is always room in the front ranks; but we should like to have it proved that even these are not full to overflowing. We do not mean to be understood as saying that there is not need for improvement in the science of medicine, not room for more brilliant minds, and better scientific work; but we are base enough to view the position from a pecuniary point of view. It is an old saying that a crow can never fly so high that he is not compelled to come down to get something to eat.

It is true every one is made to understand, even by the college professors, that the profession is not one from the practice of which a fortune is to be gained, but it is also confidently if not blindly and wildly asserted, that by hard work a competency is assured and an enviable reputation attained. We believe in the latter condition, but not in the former. It is well known that the larger number of really talented men in our ranks were poor, and so far as statistics would seem to prove, the greater a man's reputation was, the less was his income apt to be. The exceptions to this rule, even in our own day, are more apparent than real, for our most successful men in practice, in a pecuniary sense, are not those most respected for their learning among their peers.

But the commencement orator, allowing for the sake of the argument that the ranks are crowded, still maintains that above the common struggling mass of ordinary intellects there are vacancies of position which every conscientious worker may help to fill, and still there will be room. This is to be understood as that higher realm of thought in which their teachers dwell, and in which there is none of that base rivalry for preferment, and none of that meanness of purpose which characterizes the lower stratum of professional society. While we forgive the innocence of such an assumption, we are discourteous enough to deny the fact. If some of these young men should ever dare, unsupported by some college ring, by social influence, or political patronage, to apply for a hospital appointment or professorship, they may be somewhat astonished at the amount of jostling, elbowing and toe-treading there is in the upper and roomier realms of professional distinction. Talk of the dignity of their profession! What would these aspiring, high-minded young men think of their pet professor button-holing some pot-house politician to obtain a position on a hospital board? What would they think of gentlemen of standing and influence stooping to displace their brethren on such a board, for the sake of filling the vacancies themselves? But as this is all done for the good of the colleges, these freshly graduated men may, in charity, claim that the end justifies the means.

The majority of these young men, however, cannot hope as yet to apply for such a position; but they intend by hard and conscientious work to prepare themselves for it. A goodly number, however, must, during the whole of this time, earn their living. Let

us for a moment watch their progress. Starting with the assumption that good, honest work must always tell, their livelihood seems a secondary consideration. The encouraging words of their teachers echo in their ears so long as they have an overdose of conceit of their own unaided abilities, and then unappreciated merit sinks into the struggling, grumbling, and unsuccessful crowd below. They find that there is no room to spread themselves above, and consequently they must be crowded below. They are not now aware of the fact that there are hundreds of young, aspiring, energetic, studious men, who, despite their acquirements, are unable to gain a decent living. Even the specialties are so crowded that, in order to practise them in some localities, patients are solicited to come for free treatment to infirmaries, dispensaries, and college clinics. This may be a method of gaining a reputation, but hardly one for making a living.

Again, does the young aspirant expect to succeed to his preceptor's business? Does he expect his teacher to aid in the hand-to-hand fight with threatened impecuniosity? From what we know of medical men generally, we are compelled to dispel his hopes. We can expect the realization of the latter when we find any older medical man making more money than he cares to collect, or having a larger field of practice than he cares to control. The instinct of self-preservation grows so strong with age, that usually, if there is any show of help at all towards the younger practitioner, it has a tendency in the end to add to the influence and increase the emoluments of the principal. If this young man chooses to be independent of such help, and has the right sort of pluck, and is willing to wait for a vacancy created by the death of some neighboring practitioner, he will eventually succeed. When the "grinders are few," "the almond tree flourishes," and the grasshopper is getting a little unsteady in his jump, he will generally find that he has enough of business, enough of bread to eat, and will also understand why he cannot afford to throw his hard-earned competence into the lap of some expectant and over-ambitious youngster. In the meantime the latter has plenty of opportunities for knowing that he is an intruder in the neighborhood. He does not appreciate this, when he first hangs out his sign. The mock civility with which he is usually received by his medical brethren so completely disarms him that he is rather encouraged than otherwise. This reception is considered by some to be in accordance with medical etiquette, and the honor and dignity of the young aspirant is considered safe. After a while, however, he discovers that in proportion as he may succeed in a small way in practice, in that proportion his patronizing friends grow cool, and he is more than ever conscious that he is forcing himself into a company in which his presence is not needed. How often we have heard it said: "Another doctor has come among us to help divide up what little patronage we have." This is the bread-and-butter question, which thrusts itself upon every medical community over the land after every graduating season; yet the college professors say, year after year, "Plenty of room in the profession for you, gentlemen. We want you all," and the colleges continue to bid for larger classes and to glorify themselves over their success in obtaining them.

In what we have said we have had reference to competent men—men who have had excellent opportunities for medical education, men who should succeed, but who, in consequence of the crowded state of the profession, cannot hope for the fulfilment of their ambitious desires. It is very pleasant to think that there is always room in the front rank by the occasional dropping out of a great man, but the more crowded the line the less chance is there for those at the foot to feel the motion which the vacancy may occasion.

THE INTERNATIONAL MEDICAL CONGRESS AT PHILADELPHIA.

If we were not otherwise informed, we might infer from the tone of the Philadelphia correspondent of a weekly contemporary, that indecision and unnecessary secrecy had characterized the preliminary arrangements for the International Congress to be held in that city in September next. But this view, as the writer himself almost confesses, is based on the fact that he found it impossible to gratify an over-anxiety to obtain the information he needed for publicity at a time when it was very undesirable that the Centennial Medical Commission, which was responsible for the faithful preparation and execution of the fully matured programme, should publish the, as yet imperfectly digested, plan of the entertainment they were about to offer. No one should be so hypercritical as to blame a generous host for hesitating to exhibit to a prematurely impatient interviewer his half-set tables, which in due season will groan with plenteousness and variety.

The work outlined for a Congress like this is of no simple kind; its details must be considered and reconsidered in every possible shape, and what may be deemed an attractive feature one day may on the next be judiciously substituted or supplemented by something of a still more interesting and magnetic character. It is therefore an unkind stab, inflicted in the house of its own friend, that the Commission should be charged with doing, only to undo at the first favorable opportunity. We learn, indeed, that this has never been done, except where strength and tone were to result from the change. The International Congress at Philadelphia has the advantage of being without a parallel; no previous Congress of a like kind is in any way connected with it. It stands on its own merits, and has no Congressional ancestral line in which it occupies a position by direct descent.

An original programme can therefore be effected by

the untrammelled Commission, and excellent material will be at its command. We have previously alluded to internationality as a desirable characteristic of the Congress; but the Commission must labor under a serious difficulty in this respect, however active they may be in their efforts to secure it, in not being able to know exactly whom and what to expect from abroad as contributors and contributions to the attractions of the sessions. The history of European congresses is very different; there is no great ocean to cross, and no long absence from other duties required to attend any such assemblage, so that many distinguished men may come from far and near to mingle in the deliberations. In such doubt the Commission will be, of necessity, compelled to arrange a schedule of entertainment, in which the main work of the Congress will be done by their fellow-countrymen, while every opening and facility will be afforded for the reception of all foreign material that will be offered them. When the preliminary programme of each day's work shall be issued, as we learn it shortly will be, we shall more fully refer to its salient points.

Reports of Societies.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, February 28, 1876.

DR. T. ADDIS EMMET, VICE-PRESIDENT, IN THE CHAIR.

ON GLEET, AND ESPECIALLY ON ITS RELATIONS TO STRICTURE OF THE URETHRA.

THE discussion commenced at the last stated meeting, upon a paper read by Dr. H. B. Sands, the President, on the above subject, was continued, and was opened by Dr. F. N. Otis, who is the chief advocate of the views attacked by the President in his paper.

DR. OTIS first alluded to the relations which gleet, stricture, and gonorrhœa sustain to each other, and believes that, inasmuch as all gleet depends upon stricture, and not upon gonorrhœa, the important question to be discussed in this connection has reference to the nature and causes of stricture. Having settled these, the different kinds of gleet will be sufficiently indicated. The summary upon this point, according to Dr. Sands, and referred to by Dr. Otis, is that the causes of gleet are not determined by post-mortem examination; that the examinations made during life do not afford any definite information regarding the causes; and that the effect produced by local measures, or constitutional remedies and management, do not furnish any well-established data upon this point. Dr. Otis conceded the efficiency of remedies, local and constitutional, in the treatment of gleet, but at the same time maintained that the cessation of the discharge does not necessarily indicate a cure, and also that it is very liable to return in consequence of trifling excesses of almost any character. But, says Dr. Otis, why go through all this inquiry as to whether the gleet depends upon a chronic inflammation, or is relieved by constitutional remedies, gleet specifics, injections, bougies, etc., etc., before asking the question with regard to its relation to urethral stricture? Dr. Otis raises the question at once, and regards chronic urethral discharges, as a rule, dependant upon strictures, whether from gonorrhœa or some other inflammatory process. Dr. Otis does not believe, however, that stricture of the urethra is necessarily caused by gonorrhœa. It is most often brought to the notice of the surgeon by that disease, but certain conditions may have been present previously, such as thickening of the mucous membrane, local spots of irritation, etc., which are increased and intensified by the gonorrhœa. The gonorrhœa is not the cause in such cases, but simply aggravates and intensifies previously existing conditions present in the urethra, which have given no special inconvenience until affected by the inflammatory processes of this affection. At this point, Dr. Otis fortified his position by quotations from Thompson, Brodie, Acton, Gross, and others, showing that organic stricture of the urethra may depend upon certain highly irritating conditions of the urine, excessive venery, and prolonged sexual intercourse, gout, rheumatism, masturbation, etc., etc. Depending then, as it does, upon such a variety of causes, it is but just to infer that stricture is present in very many cases in which it has never been detected, and there would be a signal failure in attempting to detect it in any urethra of a capacity above 25 mm. in circumference, if governed by the limit in size of sounds recommended by Dr. Sands for common use.

The doctor then proceeded to the discussion of the questions, What amount of contraction is necessary to produce prolongation of gleet? and What degree of contraction is worthy of being called a stricture? In this connection allusion was made to the little obstructions, or wrinklings found in the urethra, which are detected by the passage of an instrument, and illustrated upon the urethral casts which have been exhibited.

These are capable of affording slight resistance to a free passage of urine, and are points at which the solid constituents of the urine may accumulate, give rise to irritation, inflammation, and subsequent thickenings of the mucous membrane. Now, suppose that two urethræ are invaded by gonorrhœa, one in the condition just alluded to, and the other one in which the mucous membrane offers no resistance to the complete passage of the urine, all things being equal, which would be the least likely to suffer from subsequent gleet? Manifestly the one which has offered the least resistance to the complete discharge of the urinary and other secretions. Dr. Otis does not regard the successive contractions shown in the casts of the urethræ exhibited as typical of a healthy canal, any more than half a dozen shrivelled hemorrhoids are indicative of a normal anal orifice.

Dr. Otis recognizes the fact, that in certain cases where stricture has been demonstrated to be present during life, the appearance of the mucous membane after death is apparently normal, and gives no evidence of the existence of contraction; but that by the passage of a bulbous sound the contraction is still recognized, thus indicating the locality of the stricture to be beneath and independent of the mucous membrane, and resulting from changes which are not necessarily cicatricial, but may be atrophy with contraction of the trabecular structure of the corpus spongiosum, or condensations of tissue in that vicinity, which may so nearly resemble the natural structures that the microscope fails to detect their true source and nature. Hitherto microscopic investigations have been directed towards the detection only of cicatricial

structures, associated with strictures, but the subject has not received from experts such attention as its importance demands. From whatever cause these contractions result, their effect is that of stricture, and they are amenable to the same methods of treatment.

With regard to the meatus, it was noted that not more than one in ten gives the test for the size of the calibre of the urethra, and it is therefore in no sense a guide to the urethral calibre.

One of the points insisted upon was, that localized contractions at any point of the canal, and from any cause, tend to embarrass the muscular structure, and render the subject liable to subsequent trouble, because of an imperfect expulsion of the urine, and a consequent retention of some of the solid constituents which become sources of irritation and consequent inflammation.

If, therefore, the obstacle is removed one of the predisposing causes to diseases affecting the genito-urinary tract is also removed.

Here Dr. Otis dwelt at some length upon the contracted meatus as a cause of various genito-urinary diseases, and concluded with the suggestive question: If relief follows division of this contracted portion of the urethral canal, is it irrational treatment, as claimed by Dr. Sands?

In discussing the question: What is the normal calibre of the urethra? reference was made to the investigations of Thompson, Sands, Van Buren and Keyes, Guthrie and others, showing the apparent want of harmony upon this point, for the standards laid down vary from 19 mm. to 40 mm. Amidst all this confusion the man who seeks advice of representative men concerning the condition of his urethra, will have given him an equal variety of diagnoses as to whether the canal is normal or stricture present. It is evident that some new method of examination should be brought forward. With this view Dr. Otis presents the doctrine that each urethra has an individuality of its own, and bears a definite ratio to the size of the penis with which it is associated. Dr. Otis does not desire to be understood as saying, that there is a mathematical exactness in this particular, but that it is a sufficiently trustworthy guide when the urethrometer is not at hand. In the tabulated report of 100 cases of normal urethræ examined by Dr. Otis, in company (on different occasions) with Dr. Stephen Smith, Dr. G. A. Peters, Dr. Bumstead, and several other surgeons, and presented to the society, the relative proportion between the penis and the urethra was shown not to vary more than 2 millimetres in 75 cases, and the average urethral calibre in 100 cases was 33 millimetres.

Concerning gradual dilatation, recommended by Dr. Sands as the best treatment for stricture, Dr. Otis regarded it as a temporary expedient, and that it should not be relied upon exclusively, nor should section be restricted to close strictures. Dilatation should be used as a temporary expedient (except as preparatory to urethrotomy), the same as demulcents and sedatives are used as preparatory treatment or for temporary relief in cases of vesical calculus not permitting of the more permanent relief by the knife or the lithotrite.

In concluding, Dr. Otis urged the necessity of the early recognition of stricture, and a prompt restoration of the urethral calibre, as a wise economy, rather than to treat the gleet, *which was a sure sign of stricture*, by injections, internal remedies, and bougies, until the obstruction had resulted in damage to important contiguous organs.

Dr. Weir proceeded to discuss the question under two heads:

1. What is the size of the normal urethra?
2. What are its normal contractions?

His conclusions were:

1. That the spongy portion of the urethra is the smaller and least distensible.

2. That a healthy urethra can be distended in its spongy portion to admit 32 to 33 mm., French scale.

3. Normal contractions frequently exist as small as 29 mm. in the spongy portion.

4. The normal size of the meatus varies from 18 to 28 mm.

5. That the urethral canal is narrowed at the meatus, dilated in the glans, slightly narrowed at the termination of the fossa navicularis, and then is nearly uniform in size through the spongy portion, again enlarges at the bulb, etc., etc.

Dr. Weir, in the course of his remarks, referred to cases in which there were evidences of stricture during life, but no evidences were found by microscopical examination after death.

Dr. Bumstead remarked that there were many questions in connection with the subject under discussion upon which he wished to have further light and more experience before venturing an opinion upon particular points. The truth in the case has probably not yet been found. But with reference to gleet and organic stricture the doctor expressed a doubt whether the former invariably depend upon the latter. He was not able to see any reason why we should not look for causes of a gleety discharge in a granular condition of the mucous membrane, hyperæmia at certain points, etc., such as are seen in chronic conjunctivitis or inflammation of other mucous membranes.

With reference to the use of the urethrometer, Dr. Bumstead regarded the feeling of fulness alluded to as a somewhat uncertain index, for it depends very much upon the sensibility of the patient, and also very much upon the care exercised by the surgeon. Dr. Bumstead agreed with Dr. Otis, and accepted the measurement of the central portion of the spongy portion, it being the least distensible, as the fairest index of the size of the urethra. How far that measurement corresponds to the size of the penis he was not prepared to say, although from the limited number of examinations he had made they had so far corresponded that he was willing to accept the statements made by Dr. Otis upon this point.

With regard to the size of the meatus, Dr. Bumstead differed with Dr. Sands, who regards it as a rough test to the calibre of the urethra, and considers the freaks of nature in this direction quite as constant as with regard to the length of the penis. We should never be tempted to take the size of the meatus as the index to the calibre of the urethral canal. He was of the opinion that, as a general rule, the meatus is smaller than the calibre of the urethral canal itself, and does not hesitate to divide it either for purposes of dilatation or for the purpose of passing instruments other than dilators.

With regard to internal urethrotomy for the cure of urethral stricture, as compared with dilatation, his experience had differed from that of Dr. Sands, and he did not regard dilatation as the best means to be employed. It is well known how unsuccessful the method of treatment by dilatation has been, for strictures submitted to dilatation have recurred time and time again, and that was the rule and not the exception. He had obtained much better results by internal urethrotomy than by dilatation or by rupture. Some years ago Dr. Bumstead was in the habit of treating

urethral strictures by the use of Holt's divulsor, but latterly he has discarded this method of treatment almost entirely. For the treatment of stricture in the anterior portion of the urethra, internal urethrotomy is rarely productive of harm, and has a great superiority over ordinary dilatation. He had also found that internal urethrotomy, when carried to a considerable extent has, in his hands, been productive of better results than when carried to a lower degree. Reference was made to several cases which had been cut so as to receive 26 French scale, and in the course of six months had so contracted as only to admit 14 or 15 of the same scale. These cases, cut a second time up to the same point, contracted a second time, and so on; so that during the last two or three years it has been his custom to cut up to 35 and 40 French, and the tendency to contraction has been much less than before. The same may be said with regard to the habitual use of very large sounds.

With reference to the statement made by Dr. Sands that instruments larger than 25 mm. were rarely necessary for purposes of treatment or diagnosis, he did not believe it could be carried out in practice. He was of the opinion that sounds larger than 25 mm. were constantly required in practice, and he should not feel satisfied if he restricted himself to that size.

With regard to slitting up the meatus, he was of the belief that it was done altogether too much, as well as cutting the urethra elsewhere, especially by the inexperienced. But he had seen no ill results from slitting the meatus, and did not hesitate to resort to the operation it necessary to effect the passage of an instrument. "I will say," adds Dr. Bumstead, "as I commenced, that the truth with regard to this matter under discussion is yet to be arrived at. The subject requires further investigation before we express a full and decided opinion as to exactly how far dilatation of the urethral canal should be carried."

Dr. George A. Peters, commenting upon the cases in which he had assisted Dr. Otis in making the measurements, remarked that he was surprised at the uniform correspondence between the actual measurement of the urethra and that called for by the circumferential measurement of the penis, the variation not being more than 1 or 2 mm. When using the urethrometer he does not depend upon the sensations of the patient, with reference to the distance to which the blades can be separated, but trusts to his own sense, and gives them sufficient separation, so that the instrument is barely grasped by the urethra without distending it unduly. At the meatus the instrument must be reduced in size two or more millimetres before it can make its exit, if it has moderately distended the canal before reaching that point.

With reference to slitting the meatus urinarius, he has had no trouble or fear in resorting to the operation, and has found it very essential for the purpose of perfecting the treatment of stricture, and sometimes for the absolute diagnosis.

He has failed sometimes in affording any relief when the meatus has been slit for the cure of what was supposed to be reflex trouble, but has never seen any actual harm arise from the procedure.

With reference to the use of instruments, the doctor remarked that he had carried them up to 35, sometimes 40, and was confident that he had obtained more permanent benefit than when they were carried only to 25 or lower.

With reference to the question of internal urethrotomy he agreed with Dr. Bumstead in the statement that it was to be relied upon for the treatment of stricture of the urethra rather than dilatation or rupture.

Dr. Keyes remarked that the fact that the urethra can be distended to very great dimensions has been known for a long time, but that this fact has any practical importance has not been shown.

So also the urethra will permit of extensive cuttings; but these, together with excessive dilatations, have fallen into disuse, thus showing that the profession has declared itself against extreme measures in these directions.

That the rectum can be dilated sufficiently to admit a man's hand, and the female urethra so dilated as to readily admit the index finger, does not necessarily make it the most judicious method of obtaining admission through these openings. Why any difference should be made respecting the male urethra he was not able to understand. That the measurements vary very greatly has been shown by the figures of every observer, and these variations which have been found in the calibre of the urethra, are enough to disprove the value of any instrument for its measurement beyond certain reasonably high limits. If anybody could establish the absolute calibre of this canal it would be valuable, but it seems difficult to obtain such a standard.

In the treatment of gleet by dilatation the doctor recommended that instruments below rather than above 30 mm. in circumference should be used, and stopped when the symptoms disappear. Dr. Keyes remarked that he had not used a sound for this purpose above the size of 36, and that size was used only once, and in a patient who had an exceptionally large urethra and penis. The symptoms of gleet cease almost always after the use of instruments below 30. In the anterior portion of the urethra internal urethrotomy is better than dilatation in the treatment of stricture. In the deeper portions of the urethra stricture does not yield to internal urethrotomy so readily.

Traumatic linear strictures are best treated by external section. And so it is; no fixed rules can be given with reference to the treatment of stricture, but every case must be studied by itself. To establish measurements, therefore, upon fixed standards which shall decide delicate questions with reference to operative interference or general treatment are apt to do more harm than good.

Reports of Hospitals.

BELLEVUE HOSPITAL.

Notes of Practice and Peculiarities of Treatment.

Typho-malarial fever—why not malarious.

This case illustrated the association of malarial with typhoid fever, and in it are found certain items of interest with reference to treatment and difficulties in diagnosis.

A male patient, aged 26, was admitted to the hospital Oct. 4th. He had been a moderate drinker, and when admitted had suffered from intermittent fever, "off and on," since July 6th. On Sept. 26th he had frequent, yellow, greenish discharges from the bowels, and on Sept. 28th he was obliged to give up his work, which was that of a hostler.

At the time of admission he complained of diarrhœa and chills, which he said had occurred every other day. The diarrhœa was relieved by forty drops of Squibb's diarrhœa mixture, and did not return.

On Oct. 5 his T. was 103° F., and he was placed upon extra diet (milk and eggs), and whiskey four ounces

every twenty-four hours. The stimulant was administered because the patient had been accustomed to the moderate use of it while in health, and it was continued throughout the course of the disease. At 10.20 A.M., Oct. 5, when the typhoid was suspected, his temperature was 102° F., P. 98, R. 24, and he received ten grains of quinine, having previously received twenty, but no effect was produced upon the temperature. From this hour a record was made almost hourly, day and night, of the T., P. and R., but only such report is made here as illustrates special features of the case.

At 1 P.M. a few spots of the characteristic eruption of typhoid fever were seen upon the abdomen. At 3 P.M. his temperature was 102⅘° F., and P. 75, which will illustrate the fact that the pulse cannot be relied upon to determine the presence of fever, but that the thermometer is necessary. Ten grains of quinine were administered by mistake, for it was determined to treat the pyrexia, in this case, by means of cold baths alone.

At 7.45 P.M. the temperature was 103⅘° F., and the man was placed in a bath having a temperature of 72° F., and kept in for fifteen minutes. The patient at first complained somewhat of a sensation of cold, but the relief which he received was so marked that he subsequently courted the bath rather than otherwise. At 8 o'clock, five minutes after removal from the first bath, his temperature stood at 98¾° F. The rule adopted was, that he should have a bath whenever the temperature reached 103° F. On Oct. 6th, at 1 P.M., the thermometer stood at 103¾ F., and he was at once placed in a bath having a temperature of 73° F., and kept in five minutes, and five minutes after his removal the temperature was 98⅘ F. At 5.30 P.M., the temperature had risen to 103½° F., and the bath was repeated as before; continued five minutes, and brought the temperature down to 98½° F. At 7 P.M. the bath was again repeated, and the thermometer fell to 99 F., after which the patient went through the night, the necessity for repeating the bath not arising. Oct. 7, at 9 A.M., the temperature was 100° F., P. 80; the general aspect of the patient was good; there was no diarrhœa, no delirium, no tympanitis of account, no tenderness in the right iliac region, and, exclusive of certain complications, the prognosis was good. Why was not this a case of malarial fever? There had not been so wide a range in temperature as is to be expected in remittent, there were no marked remissions, and there were no obvious manifestations of the malarial element after the administration of the forty grains of quinine. The eruption of typhoid was marked, although not abundant. It was thought quite probable that the malarious element would manifest itself in the way of a chill at about the time of convalescence.

TEMPORARY APHASIA AND HEMIPLEGIA.

The history of this case is brief, and its interest at once apparent. A male patient, æt. thirty, and an *occasional* drinker, had an attack of articular rheumatism one year ago. Three months after the occurrence of the rheumatism, he was attacked suddenly with aphasia and right hemiplegia, both of which soon disappeared, but that attack was followed by five or six similar ones during the course of one afternoon. Neither the hemiplegia nor aphasia remained for any considerable length of time. It was thought that these attacks were probably due to embolism affecting the middle cerebral artery or some of its branches. There was, however, no evidence of valvular lesion of the heart at the time of their occurrence, nor has there been since. Especial attention was then directed to the fact that emboli may come from collections of fibrin, so situated in the heart cavities as to prevent the production of a murmur because they are outside of the current as the blood passes through the organ. This fact is, perhaps, too much overlooked in making a differential diagnosis between embolism and cerebral hemorrhage as causes in any given case of hemiplegia, and it is doubtful whether the temperature of the patient will always enable the diagnostician to decide. decide. Peripheral paralysis, independent of the above, was also present.

Medical Items and News.

COLLEGE OF PHYSICIANS AND SURGEONS—COMMENCEMENT EXERCISES.—The sixty-ninth annual commencement exercises of the College of Physicians and Surgeons (Medical Department of Columbia College) took place on the evening of March 1, in Steinway Hall, and were attended by an audience composed mainly of the friends and relatives of the graduates, which filled every available part of the hall.

Prof. Alonzo Clark, president of the College, presided. The Hippocratic oath was administered to the graduates by President Barnard, of Columbia College, after which the degree of Doctor of Medicine was conferred upon ninety-three graduates. President Clark then delivered a short and sensible address to the graduates, giving them some useful hints in regard to the securing of professional success, after which Prof. Dalton announced the following prizes: First prize for thesis, $50, Abraham Mayer, New York; second thesis prize of $25, to David H. Davison, New York; Stevens triennial prize for the best thesis on the use of the application of the spectroscope in its relations to practical and scientific medicine ($200), to Dr. E. Rosenberg, New York; prize of $50 for best examination in anatomy to Frederic P. Griswold, Conn.; prize of $100 for best examination in diseases of children, to J. Augustus Walther, New York. For best clinical reports, Howard E. Wilson, of Mass., received a case of surgical instruments; Charles F. Stillman, of New Jersy, $50, and Edward B. Foote, Jr., of New York, a microscope; and George S. Knickerbocker, H. Ashland Clay, S. O. Vanderpoel, Jr., Alonzo Blauvelt, of New York, and Algernon T. Bristow, of Brooklyn, received honorable mention.

The Alumni Association prize of $400 was awarded to Dr. Thomas E. Satterthwaite, for an essay on the structure and development of connective substances.

Dr. Frederic A. Lyons, of the graduating class, delivered a valedictory poem, which was a very creditable and talented production, and was very flatteringly received by the audience.

Rev. Dr. Bellows made the address to the graduates, choosing for his subject, "Quackery in the Profession." The exercises were enlivened by appropriate music.

MEDICAL SERVICE AT THE CENTENNIAL.—There is is now being erected upon the Centennial grounds a building of some size, which is to be used as a medical headquarters. Two small wards—one for males, one for females—are to be attached, with beds, medical supplies, and everything in readiness for any emergency. At all times during the exhibition there will be a physician on duty in this building. Amidst the multitudes who will throng the Centennial there must be from time to time cases requiring immediate attention,

—sudden illness, accidents, and, if the summer prove a hot one, sunstroke, etc., etc.; so that the provision made seems to us a very wise forethought. No patients will be kept over night in the hospital, the beds being provided simply for the relief of cases of severity until they can be removed in the ambulance to their homes or some of the city hospitals. Some of our country brethren, mayhap even of our city confrères, will be glad to know that large and commodious offices will also be furnished in the building, in which the staff will be at all times happy to receive such physicians as may desire a few moments' rest from the toil of sight seeing.—*Philadelphia Medical Times.*

Death of Charles H. Clerke, M.D. At a meeting of physicians of Geneseo, on the 6th day of December, 1875, at the office of Drs. Wells and Antes, Dr. J. L. Shaw being chosen chairman, and Dr. H. T. Antes, Secretary, the following preamble and resolutions, as presented by Drs. Shaw and Wells, approved by a committee of Drs. Pomeroy, Brown and Hayden, were adopted:

Whereas, It has pleased the Ruler of life and death to take from his earthly labors and usefulness our friend and professional brother, Charles H. Clerke; therefore,

Resolved, That in the decease of Dr. Clerke the medical profession of Geneseo have sustained the loss of one of their best and most highly-esteemed associates—esteemed for his professional acquirements, his practical skill and success as a physician—esteemed for his honorable and upright character, his unvarying trustworthiness, his cordial bearing and loyalty to duty.

Resolved, That we will cherish his memory as a bright example of professional rectitude and private virtues worthy of our emulation.

Resolved, That in making post-mortem examination we are not influenced by idle curiosity, but by the positive request of deceased, and for the cause of science and humanity.

Resolved, As an emblem of our respect for the deceased and family, we will wear crape on the left arm for thirty days.

Resolved, That a copy of these resolutions, signed by the medical profession of Geneseo, be transmitted to the family of deceased, with the expression of our heartfelt sympathy in their great bereavement.

Resolved, That these resolutions be published in the papers of the city, and a copy sent to his aged mother, and that a notice of his death be forwarded to The Medical Record, of New York City.

Signed, Dr. J. L. Shaw, Dr. S. T. Hume, Dr. D. L. Machesney, Dr. Ira R. Wells, Dr. Enos Pomeroy, Dr. W. C. Brown, Dr. Wm. Hayden, Dr. T. H. Fulton, and Dr. T. H. Antes, Secretary.

Geneseo, Henry Co., Ill.

Free Hospital for Children.—The last annual report of this institution shows a total number of ninety-six patients treated. The medical staff is as follows: Consulting Physicians, Austin Flint, Sr., M.D., and Alonzo Clark, M.D. Consulting Surgeons, George A. Peters, M.D., and Erskine Mason, M.D. Attending Physicians and Surgeons, Robert Watts, M.D., and Charles T. Poore, M.D.

The Society have purchased the building they now occupy (Thirty fourth Street and Eighth av.) for $30,000. The hospital is intended for the exclusive reception of children, and it is always to be entirely free to the helpless little ones. One of the means taken to raise the required amount of purchase money, and at the same time give the children a proprietor's interest in the building, is to ask each child to contribute one brick. The cost of a brick when in position is estimated at ten cents, and it is desired to have 350,000, equivalent to $35,000. An illuminated card will be presented to each purchaser of a brick, signed by Bishop Potter and the Treasurer, stating that he (or she) "has placed one brick in St. Mary's Free Hospital for Children." Although this plan has been originated quite recently, 10,000 bricks have been subscribed, and the popularity of the scheme with the Sunday school children is such that no fears are entertained of its ultimate success. It is also desired to establish a training-school for girls. A modest beginning, under the Sisters of St. Mary, has already been made in the present building, and it is hoped that ere long they will have a more suitable house, provided with all the necessary and systematic arrangements.

Trichinous Pork.—The Scientific Committee to the Prussian Ministry of Medical Affairs have recommended a method of disposing of and utilizing the carcasses of condemned hogs. They assert that the fat can be used as lard without danger if it is melted out of its tissue by roasting; and as it would be dangerous to bury the deceased meat, for fear of the infection of other animals, they recommend that it be boiled down for the manufacture of soap and glue.

The Medical Society of the County of Kings (N. Y.) intend to publish their proceedings monthly in pamphlet form.

Charges to Clergymen.—A correspondent from Boston writes: "An item in The Medical Record of March 4th, concerning charges to clergymen, reminds me of personal experience.

I once attended a child of a clergyman for some weeks. The child was anæmic, and after considerable attention was brought up to the health line. I was asked what my bill was. I replied, "Nothing."

Some weeks afterward I was surprised to find that the family had engaged another physician, who never failed to charge every patient and get his money. I expressed my surprise to an intimate friend of mine, who replied: "If you will not mention it, I will state that the clergyman's wife, in a conversation with my wife, said: 'We employed Dr. ——— to attend Mary, but he didn't charge anything; so we concluded that he could not be good for much, and now that Henry is so very sick we concluded to employ Dr. ———.'"

T.

French Prizes.—The *Grand Prix Montyon de Médicine et Chirurgie*, valued at 10,000 francs, was taken by M. Onimus, his subject relating to investigations on the application of electricity to therapeutics.

M. A. Guerin also received a prize of 2,500 francs for an article showing the value of cotton dressings in the treatment of wounds.

MM. Bergeron and Hôte received 2,000 francs for a work on poisoning by the metallic poisons.

M. Rigaud received the *Prix Barbier* (2,000 francs) for his articles on the treatment of varicosities in the lower extremities and varicocele.

Professor Chauveau, of Lyons, received the *Prix Lacaze* (physiology) for his investigations in the domain of virulent diseases.

The *Prix Bienaimé* (20,000 francs) given for the discovery reflecting most honor on the country or of most value to it, was given this year to M. Bert for his works illustrating the influences which the modifications of barometric pressure exercise on the phenomena of life.

Medical Advertising.—Concerning a recent reference to his paper on the above subject, Dr. Fields writes:

"It was presumed that the clandestine newspaper advertising that gave occasion for the article entitled "Doctors and Newspapers" was confined to this locality, but as "some of our New York brethren are so well versed in this business that they can give Dr. Fields a great many useful hints," the closing paragraph of the article may have more general application.

"And instances are not wanting, where the exploits of aspiring members in good standing in our own profession, have been the subject of extravagant newspaper notices. Such occurrences are always 'unavoidable' or 'accidental' or 'very mortifying to the pride' of the recipients, but if a revision of the code should remove the occasion for the lying there is about such matters, it is fair to presume that among other benefits, would be that of improving professional morals."

A New Pair of Siamese Twins.—At a recent meeting of the New York Pathological Society, Dr. John E. Blake presented a pair of infants joined after the fashion of the Siamese twins. The specimen was merely loaned to him by a gentleman who had purchased it for the Anatomical Museum at Sweden. The twins (females) were born in Tobasco, a town in Mexico, are reported to have lived nine days, and to have weighed 15 pounds. The mother was an Indian and the father a mulatto. One twin showed the characteristics of the former race and the other of the latter. In this connection it is well to state that the *Students' Journal and Hospital Gazette* (London, Feb. 12) reports a similar case. "The wife of a carpenter residing in Hastings was delivered of twins (girls), who were united by a cord or ligament of flesh drawing both breasts together." The infants, who were well developed and possessed pretty features, did not survive their birth. The case has attracted some attention among medical men in that place, and photographs of the twins have been taken.

The Eucalyptus in the Campagna.—A paper was recently read before the London Pharmaceutical Society, wherein the following statement was made: In the Campagna, some three miles from Rome, a century or so ago, there was a village containing various churches and a monastery, which had to be abandoned on account of the malaria. Up to 1869 or 1870 the churches there were in ruins. Six years ago two French Trappists planted the *Eucalyptus globulus* in the village, some of the trees having now attained a height of thirty feet. For the last two years the monks have inhabited the ruined convent without suffering the least inconvenience, using, from time to time as a febrifuge, a decoction made from the leaves of the tree. Italian botanists and physicians are urging the Government to plant the *Eucalyptus* in quantity in the Campagna, believing that by its means these deadly plains may be restored to that flourishing condition they had onceattained during the periods of early Roman history.

Overcrowding in our Schools.—The subject of overcrowding in the public primary schools is engaging the attention of one or two of our leading secular papers. One of the latter is publishing elaborate reports of visits to the different schools in question. We hope they will have the effect of drawing the attention of our legislators to the expediency of increasing the accommodations of the little ones.

Milk the Cause of an Epidemic.—An epidemic of typhoidal character has just broken out in a small Lancashire village of some 500 inhabitants, where 150 people were taken ill. It was quite conclusively shown that the poison came from milk which had been furnished by a sick cow.

A Medical Lord Mayor.—The present Lord Mayor of Dublin is Dr. G. B. Owens. The *Medical Press and Circular* says of him: "In ascending the mayoral chair Dr. Owens has shown a beneficial example both to his metropolitan brethren and the citizens of Dublin, for he has proved that active medical practice is no bar to the praiseworthy discharge of public duty, and that the claim of a physician or surgeon to civic honor will be recognized by the citizen whenever high social qualities accompany administrative ability."

Double-Headed Diplomas. — A correspondent from Carthage, Ill., writes: "In your issue of Feb. 26th, you mention 'a new time-saving method of securing a diploma,' and credit those Siamese twins institutions at Louisville, Ky., with inaugurating it; but the credit (?) for this innovation belongs farther west. The College of Physicians and Surgeons of Keokuk, Iowa, has had a winter and summer course of lectures in operation for three or four years past, and grants diplomas after an attendance on the two courses, so that a student may commence attending lectures in October and graduate in the following May."

Diphtheria.—Mr. Edward Garraway (*Lancet*, Feb. 19) says that in the earlier stage of the deposit of this disease, "a single painting with a strong solution of nitrate of silver will effectually destroy the parasite and rescue the patient."

Army News.—There have been no changes of stations or duties of medical officers of the army for week ending March 4, 1876.

Vivisection.—The Royal Commission on vivisection have made a report, in which they have come to the conclusion that the use of animals for experiments is not by any means so cruel and reckless as has been alleged. The Secretary of the Royal Society for the Prevention of Cruelty to Animals has now acknowledged that he does not know of a single case of wanton cruelty, and the Commissioners themselves report that a general sentiment of humanity on this subject appears to pervade all classes in the country. They are opposed to any legal enactment for the prevention of any physiological experiment, and maintain that such experiments before medical classes are necessary and legitimate if performed with anæsthesia. In conclusion, the Commission recommend that vivisections be placed under the supervision of the Home Secretary, by means of a system of licensing and registration.

Weekly Bulletin of Medical Societies.

Monday, March 13.—N. Y. Ophthalmological Society; N. Y. Medico-Historical Society.

Tuesday, March 14.—East River Medical Association; Yorkville Medical Association.

Wednesday, March 15.—N. W. Medical and Surgical Society.

Thursday, March 16.—N. Y. Academy of Medicine, 12 West 31st street.

Friday, March 17.—Medical Journal Association: Dr. McLane Hamilton, "Genital Irritations as a Cause of Nervous Disease."

Original Communications.

DIPHTHERIA.

CONDENSED FROM LECTURES DELIVERED IN JEFFERSON MEDICAL COLLEGE, ON MAY 13TH, 17TH, 20TH, AND 24TH, 1875.

By J. SOLIS COHEN, M.D.,

LECTURER ON LARYNGOSCOPY, AND DISEASES OF THE THROAT AND CHEST.

PART V.

SEQUELÆ.

The paralyses that occur during convalescence, or after its establishment, or after the height of the disease has been passed, are indicative of a profound morbid impression on the nervous system. This impression is in some respects characteristic, although similar paralyses are found to occur after other severe specific systemic affections, as small-pox and typhoid fever. The amount and intensity of these paralyses of diphtheria are by no means directly proportionate to the severity of the affection.

The palate is the most frequent, and usually the earliest seat of the paralysis. It is seen to be relaxed, and does not contract upon contact with it of instruments or stimulus. The results are difficulty of swallowing, regurgitation of fluids through the nose, and an altered (so miscalled nasal) tone of voice. It seldom occurs before the third or fourth week of the disease, although it has been noted as early as the ninth day. Cutaneous diphtheria is sometimes followed by the same sort of paralysis of the palate, a significant fact indicating that the impairment of nervous force is due to systemic poisoning rather than to any local effect upon the peripheral terminations of the affected nerves themselves.

The pharynx, and, to some extent, the œsophagus also, are sometimes paralytic after diphtheria; under which circumstances the difficulty of swallowing is still greater, so great sometimes as to necessitate feeding through a stomach tube. Vomiting, however, may occur even after swallowing is impossible. The nerves of the larynx may be paralyzed, in which case there will be impairment of voice, constriction of the glottis, or immobility of the epiglottis, according to the nerves impaired. Laryngeal paralysis, favoring the escape of food into the air-passages, necessitates the use of the stomach tube. Constriction of the glottis would be an indication for tracheotomy. The nerves of respiration are sometimes impaired, and we have dyspnœa or apnœa in consequence, so that the institution of artificial respiration may be temporarily requisite from time to time. The cardiac nerves may become implicated, a manifestation, often, of fatal significance, the activity of the heart diminishing to from sixty to forty pulsations in the minute, or down to thirty, and even below that before death.

In addition to these manifestations there may be impairment of the organs of special sense: taste, smell, hearing, and vision. In fact the paralyses may be manifested in any of the organs and muscles in which paralysis is manifested under other conditions.

The treatment of the paralyses following diphtheria consists in the use of the ordinary methods of invigoration—fresh air, baths, and tonics—under the influence of which the nervous system gradually undergoes recuperation, and the paralyses subside. Should this not be the case, the use of strychnia and of phosphorus are indicated, while local applications of the electric current are calculated to hasten the progress of restoration to normal function. Symptoms of paralysis sometimes remain for several months after convalescence from the diphtheritic manifestations. Occasionally they are insusceptible of amelioration, and if important functions are interfered with they may be the direct cause of death, as in paralysis of the respiratory organs, the heart, and the pharynx and œsophagus.

COMMON MEMBRANOUS SORE-THROAT.

It would be improper to conclude these lectures on diphtheria without alluding to a non-specific diphtheritic sore-throat, which is often confounded with diphtheria. The local manifestations are similar to those of diphtheria, but their mode of origin is different. Under general subjective symptoms of ordinary catarrhal sore-throat, small vesicles form upon the palate, tonsils, or pharynx, the contents of which become turbid. These vesicles either subside in two or three days, without leaving traces of their presence, or they rupture, leaving small ulcers, which soon become covered with a plastic exudation which spreads and coalesces with other patches which have commenced in the same manner at other portions of the surface.

The prognosis is favorable, the affection subsiding spontaneously in a week or ten days; though it is occasionally fatal, in children, from extension of the pellicle into the air-passages.

The treatment consists in the administration of tonics constitutionally, and the local use of alum, borax, or mild astringents when required.

In the presence of epidemic diphtheria, it would be very difficult to distinguish a case of common membranous sore-throat; and in case of doubt the better plan would be to treat the case for diphtheria, as unnecessary activity would not be productive of injury. But when these cases get well, as they almost always do, we must avoid recommending for diphtheria some inefficient remedy, during the use of which a case of common membranous sore throat has gotten well spontaneously. Much of the success attributed to some of the remedies highly lauded in diphtheria has been due to their employment in unrecognized cases of common membranous sore throat, by no means an infrequent affection, in large cities, at all seasons.

A CLINICAL CONTRIBUTION TO THE ETIOLOGY OF ACUTE CARDIAC INFLAMMATIONS.

By EDWARD J. BERMINGHAM, M.D.,

NEW YORK.

It is thought that the following cases will be of interest, as bearing upon a point doubted by a large number of the profession, viz., the occurrence of acute cardiac inflammation as a primary idiopathic disease.

Case I. *Acute Primary Idiopathic Endocarditis.*—On December 11th, 1875, I was called to see M. K., æt. 50, widower, cloth-presser by trade, who related the following history:—Until ten days ago he had enjoyed perfect health, hardly knowing a sick day throughout his life. His habits have not been of the best, as he has been a steady drinker, and would im-

bibe to intoxication a couple of times monthly. Has never used tobacco. Ten days since he returned from his business as usual, enjoying the best of health, and not under the influence of any stimulant; and, after building his fire (he lived alone and was his own housekeeper) was seized with severe pains in the præcordial and epigastric regions. These pains he described as feeling as though knives were passing through him. From this time he began to complain of his heart troubling him, and a slight cough developed. A physician was called in, who prescribed for the patient, but made no subsequent visits, and, in consequence of his neglect, I was sent for to-day. I found the patient to be an extremely nervous and irritable individual, easily excited, and considerably annoyed about his condition, which did not improve in the least, and caused him to pass many sleepless nights. An examination of the lungs revealed râles over both, anteriorly and posteriorly, respiratory sounds about normal, and slight dulness on percussion. Heart beating so irregularly and rapidly that the sounds were not distinguishable, but there seemed to be a roughness of both. Pulse could not be counted, about 180. Tenderness on pressure and pain in epigastric region. Bowels loose. Nausea at times, but no vomiting. Eructations. Liver neither enlarged nor tender. No œdema of extremities. Urine examined and found to be normal. Ordered mustard leaf over epigastrium, Tr. digitalis x., quin. sulph. gr. ii., every three hours; sleep to be procured by hydrate of chloral; and light but nutritious diet.

Dec. 13th. To-day the patient is much more composed, and is entirely free from pain. Heart slightly improved, but still very rapid and irregular. The roughness spoken of above is more perceptible, but no murmur can be detected.

Dec. 14th. Dr. J. J. Henna saw the patient in consultation to-day. He could detect no murmur, but the pulse-tracing by Marey's sphygmograph, in the use of which Dr. Henna has had a large experience, indicated *mitral regurgitation*. Pulse 130. Lungs in the same condition.

Dec. 31st. General anasarca has gradually developed, and at present is very distressing, as well as the œdema of the lungs. Of late the urine has contained a trace of albumen. Hot air and vapor baths, and diuretics and cathartics make no impression. The pulse has been brought down to 80 by the digitalis, and at present it is very little out of the way as regards regularity. To-day Dr. S. A. Raborg was called in consultation. He could detect no murmur, but only roughness of the heart sounds. The treatment was continued.

Jan. 10th, 1876. Pulse 60, and regular. Condition otherwise unchanged.

Jan. 20th. Condition the same. Patient suffers a great deal from the distressing cough, and his whole cry is for its relief. An examination of the heart to-day (the first for three weeks) revealed a loud blowing murmur, heard with and following the first sound, most distinct at the apex. The patient and his friends were anxious to have an expression of opinion in regard to the prognosis of his case, and I accordingly explained to them, as well as I could in untechnical language, his exact condition; and held out no hope whatever of an ultimate complete recovery. He and his daughter, the parties most immediately interested, expressed themselves as perfectly satisfied that the case should remain in my hands, and that all that was possible would be done for the patient. A few days later, however, I learned that a doctor had been called in, and had substituted another line of treatment, from which he promised the patient a complete cure in between five and six weeks. The treatment which I had adopted throughout consisted of diuretics, diaphoretics, cathartics, and tonics. A hot-air bath which I had procured for the patient was removed by the attendant in payment or part payment of fees, and the poor fellow was thereby deprived of about the only means of producing a healthy action of the skin. These facts were related to me by the patient himself.

The subsequent history of the case is related in a few words. The patient did not improve under the new treatment, but failed gradually, and died quietly on February 17th, 1876.

The first point of interest is in respect to the diagnosis. During the first part of the period in which the case was under observation it was regarded as a functional disorder, notwithstanding the roughness of the heart sounds, which was thought to be due to a chronic affection of the valves arising from the irritation of alcohol (the man had been a steady drinker), and besides it was not sufficient to give rise to such a marked disturbance. The sphygmograph pointed to the nature of the trouble in the earliest stage of the affection, but as the physical signs did not agree with it its testimony was cast aside. In fact, it was not until the mitral regurgitant murmur had developed so as to be audible that the case was comprehended as one of acute endocarditis. Of this there cannot be a doubt, as the murmur was most decidedly developed while the patient was under observation. Such being the case, it is an interesting fact, and one of value also, that the patient had never suffered from rheumatism, and therefore the testimony offered by this case is contrary to that generally laid down in text-books, viz., that acute endocarditis seldom or never occurs as an idiopathic affection.

Case II. *Acute Primary Idiopathic Pericarditis.*—L. S., æt. 17, employed in book-store. A couple of days since became overheated while carrying in some books from the sidewalk, and as a consequence perspired freely; while in this condition he was suddenly chilled, and during the evening of the same day had several severe chills of short duration. Pain in the præcordial region and fever succeeded, and this evening (January 22d, 1876) I was sent for. I found him in the following condition: Pulse, 132; temperature, 102¼° F.; pain and oppression in cardiac region, which is increased upon pressing upwards from the epigastrium, and is then aggravated by pain on the left side of neck; dyspnœa; countenance somewhat anxious; slight epistaxis; occasionally a cough. Physical examination revealed a few râles here and there over both lungs, anteriorly and posteriorly; lungs otherwise healthy. Over heart was heard a double friction sound, synchronous with the cardiac pulsations, which was increased upon the patient holding his breath. Area of cardiac dulness not increased. Ordered application of emplast. cantharid. over seat of pain; a laxative; quin. sulph. gr. ij., tr. ferri chlor. ℥v., every three hours, and U. S. liq. morph. to be given in sufficient quantity to relieve pain, say ʒ i. every three hours, alternating with the quinine and iron; and port wine. A few days later, as the pericardial friction sound was supplemented by the effusion into the pericardial sac, a pleural friction sound was manifest in the left mammary region. The signs of pleuritis developed progressively, and ammon. muriat. was added to the treatment. In consequence of the gravity of the symptoms, I requested a consultation. Dr. J. A. Monell was accordingly called in, on February 5th. At this time there was bulging of the whole left side, dulness on percussion, and bronchial breathing. Res-

piration labored; pulse, 112; temperature, 102¾ F.; respiration, 42; heart laboring. Dr. Monell concurred in the diagnosis—acute idiopathic pericarditis with effusion, and acute pleuritis with effusion—and we decided upon the following course:

℞ Quin. sulph..... ℥ i.
Tr. ferri chlor..... ℥ ij.
Ammon. muriat..... ℥ iss.
Pot. iodidi..... ℥ iij.
Aquæ, q. s., ad..... ℥ iv.
M. Sig. teaspoonful every three hours.

Inf. digitalis (gr. x.–gill) ℥ i., three times daily. Counter-irritation to be kept up by

℞ Ol. tiglii..... ℥ i.
Ether. sulph..... ℥ iij.
Tr. iodinii..... ℥ iv.
M. Sig. externally.

Opium and wine as indicated, and nourishing and concentrated food.

March 5. The treatment has been varied as the symptoms indicated, and the patient has not had an unfavorable sign. For the past two weeks the pleuritic effusion has been disappearing quite rapidly, until at present it is almost entirely gone. The cardiac effusion, however, is much slower in being absorbed, although it is progressing as well as can be expected. Pulse ranges from 100 to 105; temperature, 99° F. Skin, bowels, kidneys, and stomach acting admirably.

This is one of those rare but unequivocal cases of pericardial inflammation occurring in a previous healthy person. It cannot be regarded as complicating the pleuritis, as both diseases progressed at about the same time, and in the early stage the symptoms of the cardiac trouble were by far the most prominent.

It is hoped that these cases may be of some little value as evidence of the fact of cardiac inflammations occurring as primary idiopathic diseases.

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RESECTION OF THE RADIUS FOR NON-UNION.

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John B., aged 30, received, April 30th, 1875, a fracture of both bones of the forearm, through their middle third, while adjusting a belt over a pulley in a planing-mill where he was employed. The fracture was reduced, and dressed with front and back splints, but at the end of nine weeks it was found that union of but one bone, the ulna, had taken place.

The limb was then put up in a plaster-of-Paris bandage, reaching to the elbow, which was removed in sixty days with no better result. August 28th, twenty weeks from date of injury, he was brought to me for treatment by his attending physician. I faithfully but fruitlessly tried friction of the ends of the fragments, and Brainard's perforators, with a like result, and as a last resort resolved to excise the ends of the bone and retain them in position by means of silver wire.

The operation was performed November 30th, as follows: The patient having been placed under the influence of ether, an incision three and one-half inches long was made on the outer side of the arm, parallel to the bone, and over the seat of fracture, and the parts exposed.

The ends of the bone, which overlapped each other, were covered with a tough fibrous membrane. This, with a portion of bone, was removed with bone forceps, no effort being made to preserve periosteum, when, finding that the extremities could be nicely approximated, they were drilled with a small Brainard perforator, and a double silver wire introduced to keep them in apposition.

The wire was then twisted and allowed to protrude from the wound, which was closed by three sutures. Splints and a roller being applied, the patient was put to bed and an opiate administered. The operation was followed by little or no local or constitutional disturbance.

The wound healed kindly, without much suppuration, and at the end of a week he was able to visit my office. The limb was examined and redressed at stated intervals, and eleven weeks from date of operation the wires were removed, when perfect union had taken place.

Original Lecture.

ON THE DIAGNOSIS AND TREATMENT OF CHRONIC SCALY ERUPTIONS OF THE PALM OF THE HAND.*

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There are three (and but three) forms of scaly disease liable to affect the palms of the hands, which are very similar in appearance, very apt to be confounded or mistaken for each other, and yet which require widely dissimilar treatment. These three are: I. *Eczema palmare;* II. *Psoriasis palmaris* (non-specific); and, III. *Syphiloderma palmare*, or chronic scaly syphilide of the palm.

The importance of correctly differentiating these diseases can hardly be overestimated, and yet I presume that there is no one who sees much of cutaneous disease who does not continually meet with cases of one or other of these affections which have been wrongly diagnosticated, and consequently wrongly and ineffectually treated for months, perhaps for years. We have now attending at the Dispensary three cases exhibiting these three forms of disease, and a brief detail of them will establish more clearly than in any other way the essential peculiarities of each, and a close comparison of the lesions will lead one to wonder how they could be taken one for the other; and yet this is constantly done, and may readily happen when each disease is considered alone and not compared in its elements with those most resembling it. The cases are as follows:

Case I. *Eczema palmare.*—This woman, aged twenty-six, bringing two healthy children with her, presents a palmar eruption which so much resembles that produced by syphilis that casual observation might mistake it for such, but careful study will show, I am sure, that there is abundant evidence that syphilis is not the cause of the lesion before us. First, then, observe that both hands are almost symmetrically affected; now, while the earlier eruptions of syphilis are generally symmetrical, lesions occurring late in the disease are wont to be unilateral, and rarely do

* Cases shown and remarks made in substance to pupils at the Demilt Dispensary, New York.

we see both hands similarly occupied by the syphiloderma of the palm. The gummata and bone lesions of syphilis appear to be influenced largely by local causes, and I have often thought that these late scaly eruptions on the palm had, as their starting-point, some local cause, the continuance of which may tend to cause the latent poison to concentrate there. In this case, then, the almost precisely similar appearances of both hands rather speak against syphilis. But, second, on further questioning we find that the patient has had the eruption for three or four years; that it comes and goes, perhaps several times in a season, being worse, as a rule, in the spring and autumn, and that its severity depends very much upon the amount which the hands are used in washing. A curious feature also is that she is not troubled with the eruption when pregnant, but when nursing, the disease is always worse. These elements speak against syphilis, but weigh greatly towards an eczematous nature of the affection. Let us now see what can be learned from the appearances of the eruption.

The left hand is most affected, and its state may be thus described. A considerable portion of the palm is bereft of its normal epidermis, is slightly reddened and somewhat scaly. I say *somewhat* scaly, because you see quite a portion of the skin, where the normal furrowing of the epidermis seems to be present, without any scaling over it; but even here the abnormal redness and the thickening felt on pinching a fold of skin between the fingers shows that there is yet trouble beneath, and these portions will sooner or later scale again unless prevented by treatment. The edges of the eruption are sharply cut, the healthy epidermis at the border standing up abruptly, almost as if cut with a punch, a state not seen in syphilis in this place: the whole of the skin of the palm is thickened pretty uniformly, and there is some cracking at the lines of motion: finally, she says that the affected portions at times discharge serum. The diseased surfaces often itch excessively.

We will shortly see how these clinical features differ from those presented by the case of palmar syphiloderma, but let us first examine another similar eruption presented by

Case II. *Psoriasis palmaris* (non-specific).—Non-syphilitic psoriasis of the palm is very rare; indeed some writers have indicated that it does not occur except when associated with psoriasis of other parts, in which case, of course, the diagnosis is comparatively easy. There can be no doubt, however, of the existence of true psoriasis affecting the palms alone, and the case before us presents features different entirely from eczema, on the one hand, and certainly not due to syphilis, for there is absolutely no corroborative history of the latter disease, and clinically it in nowise resembles either.

I must here say that when I used the term *non-syphilitic psoriasis*, I did not intend to imply that true psoriasis can ever be of syphilitic origin, or that the scaly eruption due to that poison should ever be called psoriasis; the expression was used because the term palmar psoriasis has very generally been applied to the eruption of syphilis, whereas I wish to claim it solely for the true disease. It is a great error, which has crept into dermatology, this using the name of one disease adjectively to express a quality of another. We may have pustular, squamous, or vesicular lesions of the skin due to syphilis, which may resemble acne, psoriasis, or eczema, but it is improper to speak of syphilitic acne, psoriasis, or eczema, nor should the term syphilitic lupus ever be applied to any of the forms of tubercular syphiloderm; great confusion must necessarily arise from such a confounding of terms.

To return to our case of palmar psoriasis. Both hands of this man, aged twenty-eight, are covered on their inner surface with a scaly eruption made up of isolated spots of different sizes, some of them touching each other where the normal epidermis is wanting. These spots are mostly circular, varying in size from one-twelfth to one-half of an inch in diameter; the surface of each one is covered with a moderate amount of scale which can be picked off, beneath which the surface is reddened, but there is no sign of exudation. On pinching up the skin you see that there is not the thickening observed in the former case, the eruption has never exuded moisture, and itches but moderately at times. Moreover, here, where the disease extends slightly on to the wrist, the characters resemble somewhat the ordinary psoriasis, certainly more than they do those of eczema, the eruption being in circles, and these scaly crusts, although not typical of psoriasis, are more light, flaky, and easily detached than in eczema. Now, while I do not know of microscopical investigations to establish the identity of this form of eruption on the hands with psoriasis as ordinarily observed, I hold that its clinical features resemble that disease rather than eczema, and, in addition to accuracy of diagnosis, I am always desirous of robbing eczema of all that I rightfully can, for at the best the term is used to designate phenomena differing vastly in appearance. The reasons, then, for establishing such cases as this as psoriasis, and not eczema, are these: the absence of itching, exudation, cracking and thickening, and the distribution of the eruption in small, round, clearly defined spots, as opposed to the single larger patches of eczema, the scaling representing at the same time that in psoriasis, altered here by the thickness of the epidermis.

Look now at the eruption affecting only the left palm of this next patient, who has been in attendance some time with constitutional syphilis, and quite a different picture is presented.

Case III. *Syphiloderma squamosum palmare.*—This man, aged thirty-eight, exhibits, as you see, on the right leg an unmistakable tubercular eruption of syphilis, his tongue presents a characteristic appearance of late syphilitic mucous ulceration, while here on the inside of the left hand there is a lesion which, with experience and study, should speak quite as plainly of the results of syphilitic infection. The date of his inoculation is unknown, as he has been repeatedly exposed with occasional venereal infections; the sore which resulted in the syphilis may have been within five years, though I have seen just such palmar syphilis twenty years after infection.

The clinical features of the eruption on the hand may be thus described. On the left palm there is a patch of diseased skin irregularly circular, of nearly two inches longest diameter, extending from very near to the radial border of the ball of the thumb to about the middle of the hand. The entire integument covering this is in a roughened state, peeling off in places, especially at the edges; the whole surface is darkly reddened, and where the epidermis has come off the color is of a more livid purple. You will notice that there is very little if any thickening in the centre of the patch, where the disease seems to have expended itself; but here on the edges there is a moderate thickening and elevation, the result of the specific infiltration of tissue. The eruption does not itch at all, and gives no annoyance except its unsightliness, though this latter is not always the case, for I

have seen palmar and plantar syphilitic patches crack and bleed and give great pain.

You will bear in mind that such a patch as we are looking at is one of the late manifestations of syphilis, not infrequently it is the only one after many years of immunity, and it is quite different from the acute congestive eruption on the palms and soles of that young man now in attendance, with the profuse, general, large papular syphilide, now only six months after infection. There, you will remember, the patches are smaller, are numerous, round, and resemble those on the rest of the body, except that the epidermis being thicker in these situations there is less elevation and a less marked discoloration in him. When he first came under treatment many of the spots on the soles of the feet were ulcerated by the pressure and maceration, and he walked with great difficulty.

Let us now take this little group of cases and analyze the histories and appearances of the lesions. The eruption in the first case, that of the woman with eczema, affects both hands, the palms are thickened, itch excessively at times, and at times discharge serum, and are almost continually cracked. In the second case, which I have described as psoriasis, the disease remains in isolated patches which scale continually; they are mostly circular and never exude, they itch but seldom, and then not greatly, and both hands are also very similarly affected. On our syphilitic patient the eruption affects but one hand, the disease is in one large patch, as is generally the case, it is and always has been dry, has steadily increased from a small spot to its present size, the scaling is inconsiderable and the margin is not evenly laid out, but is of irregular outline; moreover, the portion denuded of its full share of epidermis is of a dark purple red color. On close examination the eruption is further found to be composed at the margin of a number of separate elements, for while eczema and psoriasis enlarge by peripheral augmentation of smaller patches, the eruptions caused by syphilis are made up of an *aggregation* of smaller portions, the cutaneous lesions of syphilis, as you know, having a tendency to assume circular forms.

Thus far of the visual appearances of the diseases offered for our differentiation, but the histories of the cases afford us ample aid as well. The woman has had her eruption for three or four years, it comes and goes, is worse in the spring and fall, and, moreover, depends very much upon the use or abuse of the hands, and on her physical state: she has never had any other eruption and gives no history of syphilis, and furthermore, brings two healthy children with her, all she has ever had, and having never had any miscarriages. The man with the psoriasis of the palms has had the disease several years, gives likewise no syphilitic history, and has had no other eruption. It is always well to examine the whole body where there is uncertainty of diagnosis, for there might exist some evidences of past or present eruption which would materially assist in diagnosis, and as before remarked, in most cases of psoriasis of the palms there will be found patches elsewhere of the disease. In our last case—the syphilitic—the other symptoms are so very pathognomonic that a mistake would be unpardonable. I remember well Bazin, when showing a case of palmar syphilis at St. Louis, Paris, looked at once at the tongue, and finding a mucous ulceration there, remarked, that when a suspicious lesion on the tongue coexisted with one on the palm, syphilis must be very strongly suspected, a point which I have verified and pointed out again and again.

We will now consider for a moment, with reference to treatment, the disastrous consequences of a mistake in the diagnosis of these cases. Apart from the wrong done, and perchance distress occasioned by ascribing syphilis as a cause of disease where it does not exist, the measures appropriate for one would not only fail to do good, but would probably do very positive injury to the others.

The prognosis, too, varies greatly with the diagnosis. In the last patient we can assure a perfect and quite speedy cure—I have seen palmar syphilis disappear within two weeks after a course of treatment had been entered upon; the second patient must have a rather more unfavorable prognosis, for it will certainly take longer to remove these hard almost horny masses of the palmar psoriasis, and the measure of success will depend very much upon the faithfulness of the patient. In the first case, of chronic eczema of the palms, the prognosis is more doubtful yet, and must be very guarded. The disease has already lasted three or four years, getting better and worse; the patient is a mother of a family, as you see, in the humbler walks of life, and must use the hands constantly in washing and over the fire, and she very probably will not or can not give the care necessary for her cure. As soon as the hands get a little better she will neglect treatment, and if she does, the disease will as surely relapse as a ball will tend to run down an inclined plane, if in pushing it up you stop anywhere short of the top. Had she the syphilitic disease, or rather, were this a case of palmar syphilis, the prospect would be brighter, for internal medication will remove that lesion even under the most adverse circumstances. The fact of our third patient having had his hand trouble several months does not diminish the prospects of his cure, whereas the years which have gone over this woman's eczema have quite another meaning.

The treatment of these three cases will likewise differ widely according to the diagnosis. The woman's hands require a moderate stimulation combined with soothing measures and internal remedies, especially arsenic, iron, and alkalies, together with cod-liver oil; the second patient's disease needs far greater stimulation, which indeed would aggravate greatly that of the woman; whereas in the case of the syphilitic patient neither of the methods about to be given for the former ones would be of any real service, but well directed anti-syphilitic measures will, in all probability, alone surely and completely remove the lesions.

This woman, then, with a tender skin, with hands cracked and painful, and yet itching greatly, requires, first, mild stimulation sufficient to relieve the itching; second, soothing applications to protect the cracked and denuded portions from the air, water, and dust; and third, internal remedies. To fulfil the first indications we will order the liquor picis alkalinus (℞ Picis liquidæ, ʒ ij.; potass. causticæ, ʒ i.; aquæ, ʒ v. M.) diluted six times with water. The affected parts are to be first gently bathed with this, then, as they improve, to be rubbed, with increasing force, first with linen, later with flannel, and this to be followed by an ointment (℞ Ung. picis, ʒ i.; zinci oxidi, ʒ i.; ung. aquæ ros., ℥ i. M.) which is to be kept applied as much of the time as possible. Internally she will be directed to take the following after each meal in a wineglass of water: ℞ Sol. Fowleri, ♏iij.; ferri ammon. cit., gr. ij; tinct. nuc. vom., ♏iv.; liquor potass., ♏vj.; tinct. cinchon. comp. ad ʒ i. M. It would be well if she could be induced to take cod-liver oil persistently for six months, even if the hands should be quite well before that time. Indeed, internal medication should always be continued for some period after the disap-

pearance of the disease, for it must be remembered that the local disease in such an instance depends largely on the general state, and if removed by local treatment is very apt to return from a continuance of the cause.

For the psoriasis of the palms, in the second patient, we will direct a good scrubbing, morning and night with ordinary soft potash soap, laying the back of the hand on a table, and using a piece of coarse flannel, and later even a scrubbing brush. The following ointment is to be kept closely applied at night: ℞ Ung. hydrarg. nitratis. ʒ ij.; ung. picis, ʒ ij.; ung. simplicis, ʒ iv. M. In view of its already long continuance it would be well to give him arsenic at the same time.

The man with the syphilitic palmar lesion will continue to receive mercury and iodide of potassium combined, in the usual formula, under which he is steadily improving. He has been obliged to stop the treatment several times from stomach irritation and other causes, which accounts in a measure for the rather tardy disappearance of the palmar lesion.

Progress of Medical Science.

Ergot and its Active Principles.—Dr. G. Levi has a long and instructive article in *Lo Sperimentale*, for August and September, 1875, in which he gives the results of his study of the physiological and therapeutical action of secale cornutum, especially in its application to obstetrics. He has endeavored to discover how its constituents act in individual cases. From all the facts collected, and from the investigations he has made, the following conclusions are derived:

1. The sum of the therapeutical effects derived from ergot are due to the presence in it of phosphoric acid.

2. The diseases for which ergot is a useful remedy receive equal benefit from phosphoric acid.

3. With ergot two distinct series of phenomena are reproduced by elements of different natures: the physiological (ergotism) recognize as a cause the vegetable principles (ergotine, erboline, etc.); the obstetrical, on the contrary, the phosphoric acid.

4. The hæmostatic effects, like the erbolic, are obtained equally, and with the same intensity and promptness, with phosphoric acid as with secale cornutum.

5. The quantity of soluble phosphoric acid found by analysis in recently pulverized ergot both in that which is old and in the hydro-alcoholic extract (ergotina), is proportional to the obstetric effects which are obtained from these various substances used separately.

Aconite and Aconitine.—M. Oulmont has been making exhaustive researches into the variations in the action of the different preparations of aconite, and the following are some of his conclusions: The alcoholic preparations of the fresh leaves, the stalks, and the seeds are almost inert in small doses, an ounce in animals and half an ounce in men producing no appreciable effects. The alcoholic preparations of the fresh roots, and the tinctures of the roots and the dried leaves, especially the two last, are more active; but they are uncertain preparations, and it is difficult to calculate their doses exactly. The officinal extract of the leaves is of little value. The extract of the roots, prepared from the aconite of the Vosges, is much more active, certain, and regular in its action, and is easy to administer, and consequently should be preferred. It can be given in doses of one-third to one-half a grain per diem, gradually increased to a grain and a half or two grains, without fear of accident.

Aconitine is very active, and great caution must be exercised in its administration. It should be given at first in doses of $\frac{1}{250}$ gr., gradually increased to $\frac{1}{60}$ gr. or even $\frac{1}{30}$ gr. He concludes with the statement that the roots contain most of the active principles, and these principles are contained in increasing quantities in the plants found in the gardens, in the Vosges, in Dauphiny, and in Switzerland. That of the Vosges should be preferred for the different preparations.—*Journal de Méd. et de Chir.*, January, 1876.

Rabies Successfully Treated by Woorara.—Offenberg, in his inaugural dissertation, Berlin, 1875, reports the case of a girl of twenty-four who had been bitten eighty days before by a dog supposed to be rabid. Injections of morphine and the inhalation of chloroform having been used without benefit, seven injections of woorara, amounting in all to three grains, were given in the course of five and a half hours. First the muscles became steadier, then the convulsive seizures less frequent, the dread of water and the photophobia disappeared, and the voice improved. Some symptoms of paralysis now appeared, which reached their maximum the following day. On the second day there was a slight relapse of the symptoms of rabies, which was checked by an injection of a little less than half a grain of the woorara. The patient recovered slowly, a certain degree of weakness and sluggishness, and especially weakness of sight, remaining at the end of two months. There was inflammation but no suppuration at the points of injection. —*Deutsche Ztschr. f. prak. Med.*, No. 52, 1875.—*Allg. Med. Cent. Zeit.*, Jan. 5, 1876.

Liquor Bismuthi for Hemorrhoids and Prolapsus Ani.—Dr. John Cleland freely admits, that in many instances hemorrhoids cannot be treated successfully without surgical operation, yet in a large number of cases operative interference is unsuitable. His attention was first called to the use of the liquor bismuthi, given as an enema, in a peculiar case of prolapse of the bowel. A middle-aged woman came for consultation, in such a condition that she could with difficulty walk, inasmuch as whenever she parted the thighs, at least one-half a yard of intestine was extruded. The whole surface of the mucous membrane exposed was of a deep raspberry red, in that chronic condition which some practitioners delight to treat with nitric acid. External supports and astringents had been tried, but had failed. The patient was then directed to mix a dessertspoonful of liquor bismuthi with half a wineglassful of starch, and after getting into bed, and returning the bowel to its place, to introduce this enema and retain it. A few weeks after, the patient returned, stating she was well. The treatment was ordered to be continued, and there was every reason to believe there was no return of the malady. In ordinary prolapsus in children, the same remedy has been used with invariable success. In hemorrhoids, where the mucous membrane is considerably involved, no application can compare with the injection of liquor bismuthi, it being painless; and as in the case of prolapsus, the improvement of the mucous membrane has a wonderful influence on both the veins and integument. In instances in which surgical interference seemed indubitable, by this treatment the patient recovered without the necessity of an operation.—*The Practitioner*, January, 1876.

THE SO-CALLED FUNGUS FOOT OF INDIA.—The cause of this strange disease, which occurs in some parts of India, especially in Madura (whence one of its names), has been attributed by Vandyke Carter to a fungus. Although the evidence was in favor of a fungus being the cause of the Madura foot, yet decided opinions of a contrary kind have not been wanting. Drs. Lewis and Cunningham, after years of study and examination of this disease, entirely negative the view that the disease has a fungoid origin. They have found indeed, in one variety, a fungus; but this appeared to be entirely secondary. They distinguish three varieties of the fungus foot, viz., the roe-like bodies, the pink particles, and the black masses. The first are shown to be fat in variously modified forms; the second are found to be pigmented concretions, not the slightest trace of a fungus or of other vegetable organisms being present in either; and the third are shown to consist of degenerated tissue, mixed to a greater or less extent with black pigment and fungoid elements. They deny that fungi or allied forms can act on healthy tissue, and really assert that disease of tissue always precedes their appearance, and is really the primary disease. They even appear to imply that fungi will only act on matter already dead, and that, therefore, living parts can never be infected by low organisms.—*The Lancet*, January 22, 1876.

DIAGNOSTIC VALUE OF THE ILIO-FEMORAL TRIANGLE, IN INJURIES OF THE HIP-JOINT.—Mr. Thomas Bryant attaches great value to this mode of diagnosis, particularly in cases of impacted fracture at the hip-joint. He confidently asserts, after repeated proofs, that while in a healthy subject the ilio femoral triangles are exactly similar upon the two sides of the body, with equal sides and equal angles, he can with equal confidence be assured that in all cases of injury to the hip, in which shortening of the neck of the thigh-bone exists, the amount of shortening can readily and accurately be made out, on comparing the bases of the triangles of the two sides. There are rare cases where obscure injuries to the hip-joint may not be cleared up by means of this test-line, but they are exceptional, whereas, by its use, a large number of cases that would have been called obscure have ceased to be so.—*The Lancet*, January 22, 1876.

DIPHTHERIA.—Dr. Robert Bell thinks that our conceptions with regard to the mode of ingress of the poison of diphtheria are far from correct. In its first stages it is purely a local disease, exactly as a chancre at its commencement is syphilis in the part only, not having yet affected the general system; or as vaccinia in its primary stage is purely local. If then the poisonous nature of the deposit in the mucous membrane of the mouth and throat can be destroyed, while the disease is yet local, we keep it in that condition and prevent its further effect on the health of the patient. Since Dr. Bell has adopted this method of treatment, he says he has lost only two cases from diphtheria, and these were cases which resisted, so that it was impossible to employ the treatment at all. He has treated a large number of cases, and with almost uniform success. From the very onset of the disease, he insists on free stimulation and plenty of nourishment. This dietetic treatment must be simultaneous, with local and general medical treatment; but the most important is the local application of substances which destroy the poisonous properties of the deposit on the throat. This application consists of carbolic acid, one part; sulphurous acid, three parts; solution of perchloride of iron and glycerine, of each four parts. The mouth should also be rinsed out frequently with a weak solution of Condy's fluid in water, and the following mixture taken in dessert-spoonful doses every two hours: R. Potassæ chloratis, ʒ iij.; acidi sulphurosi, ʒ iiiss.; tincturæ ferri perchloridi, ʒ iij.; glycerini, ℥ i.; aquæ, q. s. ad ℥ vj.—*British Medical Journal*, January 29, 1876.

THE RESULTS OF OPERATIONS ON SCROFULOUS PERSONS.—M. Bernard, in the course of his studies on scrofula in general, has arrived at the following conclusions on the subject. In the scrofulous the grave complications which succeed the traumatism are rare. The attacks of erysipelas or of lymphangitis are mild, when they occur at all, while diffuse cellulitis, gangrenous inflammation, and pyæmia are hardly ever met with. In general the scrofulous resist well the shock of an operation, so much so that Gerdy has been able to cite three amputations for white swelling in which the traumatic fever was almost nil. But it must be confessed that, although the scrofulous support the shock of an operation well, and rarely succumb during the first two or three weeks, the period of danger lasts much longer in them, and the final result is much more doubtful. In numerous cases the operation produces both local alleviation and an amelioration of the general symptoms, by removing a constant source of pain and exhaustion; but this temporary improvement, though raising hopes of a complete recovery, does not persist, and the patient soon after dies, worn out by the general disease. M. Verneuil expresses himself as follows on this subject: "Surgical intervention rarely arrests scrofula, aggravates it sometimes, but most frequently does not affect its evolution at all." M. Bernard speaks strongly of the value of alteratives, and especially of sea baths and country air.—*Le Bordeaux Médical*, January 25, 1876.

INTERMITTENT BRONCHO-PNEUMONIA.—In a paper read before the Academie de Médecine, on January 11, M. Bourgade, after some remarks on the changes in the paludal miasms in the provinces of central France, produced by sanitary measures, and the ameliorated hygienic condition of the population, stated that the typical intermittent fever has partly disappeared, to be replaced by an insidious form which impresses a peculiar stamp on all diseases and gives them an abnormal gravity. His paper treated particularly of the special characters assumed by broncho-pneumonia under the influence of the paludal miasm. This affection presents all the symptoms of the typical broncho-pneumonia, but with certain peculiarities that indicate a special pathogenic influence. For instance, the initial chill is repeated during several days, but does not indicate a periodical increase of the disease; or if the chill be wanting it is replaced by malaise, and a dull pain in the region of the spleen. Percussion reveals more or less extensive dulness, and measurement a remarkable enlargement of the thoracic cavity, due not to pleurisy, but to the congestive turgescence and disappearance of the lung noted by M. Woillez. The auscultatory signs are less marked than in the simple form of the disease, and vary in intensity with the appearance and disappearance of the febrile exacerbations. The pathognomonic character consists in fact in daily exacerbations of fever, which appear regularly night and morning, rarely in the evening, when, on the contrary, marked remissions are observed. The course of the temperature is not less remarkable. At the time of the access of fever it may rise to 104° or 106,¾°, then fall to 102½° or 100¾° F., and go on rising and falling with the exacerbations and remissions of the fever. The course

of the disease is irregular, and its duration often prolonged. It may last four or five weeks. It yields easily and rapidly to quinine, when given early, but if the miasmatic element be overlooked, the prognosis is grave. It may end fatally when neglected.

M. Bourgade believes this broncho-pneumonia to be, not an inflammatory disease, but an affection allied to intermittent fever. The irregularities in its symptoms, its advance by fits and starts, the regular daily exacerbations of the fever, and finally its ready submission to quinine, all point to its paludal origin. It is a special form of intermittent or remittent bronch.o-pneumonia.—*Gazette Hebdom.*, January 14, 1876.

Veratrum as an Antidote to Opium.—Dr. J. S. Todd, in a paper read before the Atlanta Academy of Medicine, advocates the use of veratrum as a substitute for belladonna in opium poisoning. He instances six cases in which this remedy was used, but does not attempt to explain its *modus operandi*. Four of these cases recovered entirely from the effects of poisonous doses of opium, veratrum being administered hypodermically. In one of these successful cases atropia did no good. Two of the six reported cases died, but in one the large amount of opium taken, and the length of time before the commencement of treatment, showed clearly to his mind that recovery was impossible. The good effects of the treatment were manifested by the length of time that intervened before death. In this case the patient received hypodermically, in less than six hours, a drachm of tincture of veratrum viride, without lowering the pulse; in fact, veratrum seemed rather to keep the heart going. In the other fatal case the patient, a boy of twelve years, was suffering from meningitis, and morphine had been given with after-symptoms characteristic of opium poisoning. Under the cold douche and three injections of three drops each of tincture of veratrum viride, the symptoms of opium poisoning disappeared, and though he died, it was from the force of the disease and not from opium poisoning.

While Dr. Todd feels every confidence in this drug as an antidote to opium, he advises not to neglect evacuating the contents of the stomach, the use of electricity and strong coffee, and recommends that the patient be walked, flagellated, tickled, etc.

Dr. Todd also firmly believes that the actions of o ium and veratrum are reciproeal, and that in verat rum poisoning opium is the remedy to be employed.

Differential Diagnosis between Serous Subperitoneal and Ovarian Cysts.—At a meeting of the Société de Médecine de Strasbourg Koeberlé read a paper on this subject, the diagnosis being based on the characters of the fluid contents. These cysts originate in the ovaries, uterus, Fallopian tubes, broad ligaments, and even in the kidneys; but, whatever the point of origin, their anatomical relations may be so similar as to render it impossible to determine to which variety they belong.

If the fluid obtained by puncture is thick, viscid, or fatty, and contains hair or epidermal cells, the cyst is ovarian; but when the fluid is clear and of low specific gravity, it is impossible without chemical analysis to say to what variety of cyst it belongs.

The fluid from the parovarian cysts, or those of the broad ligament, contains no albumen, is clear, slightly saline, and does not become cloudy when acids are added to it.

The ova ian cysts contain a fluid rich in albumen, and especially in paralbumen. (The precipitate obtained by nitric acid is redissolved in acetic acid.)

The tubal cysts, on the other hand, contain albumen and a little paralbumen. (Acetic acid increases the precipitate.) Exceptions to these rules exist, but they are very rare.

M. Koeberlé closed his communication with the following table, which includes the principal differentiai characteristics of these cysts:

Serous subperitoneal cysts.—Always unilocular. Contents very fluid, usually colorless and limpid as water, sometimes very saline; contain as a rule no albumen. Albuminous precipitate obtained with nitric acid, may be soluble in an excess of that acid.	*Ovarian cysts.*—Uni- or multilocular. Contents fluid, flowing more or less slowly, viscid, glutinous. Usually rich in albumen, metalbumen, paralbumen, giving with nitric acid a precipitate soluble in acetic acid.
	Contents more or less glutinous, sometimes entirely incoagulable by nitric acid and heat; in rare cases limpid as water, slightly frothy, containing only traces of albumen (Colloid cysts).
	Pure fat, fluid, mucus, masses of epidermis, hairs in suspension (Dermoid cysts).
	Examined under the microscope the fluid contains yellowish granular globules, characteristic of ovarian cysts, from three to thirty-five, or even sixty millimetres (?) in diameter. Their envelope is rendered more distinct by the addition of acetic or phosphoric acid. Usually emaciation more or less pronounced.
Embonpoint and generally a healthy look, even when the tumor is very large.	
Fluctuation usually well marked.	Fluctuations more or less distinct, sometimes limited (Multilocular cysts).
Walls thin.	Walls sometimes thin, sometimes more or less thick, firm, hard, bossed (Multilocular cysts).
	Ossification in parts (Dermoid cysts), sometimes the very hard parts are due to calcareous incrustations of the walls of the cysts.
Development slow, at times.	Development generally rapid, sometimes slow.
Attain, sometimes, a considerable size without becoming adherent to neighboring organs. Sometimes very adherent even when small.	Generally adherent from an early period, before their size is at all considerable.

—*Le Bordeaux Médical*, Jan. 11th, 1876.

The Indiana Medical College—Department of State University—held at Indianapolis its Seventh Annual Commencement, February 25th. The degree of Doctor in Medicine was conferred by Rev. Dr. Moss, President of the University, upon thirty-two graduates.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, March 18, 1876.

WHAT OUR MEDICAL SYSTEMS ARE, AND WHAT THEY MAY BE.

It is very pleasant and proper, in this our centennial year, to look back over the history of American medicine and American medical men, and mark with pride the advances that have been made in every department of our art. Perhaps we are apt to be too busy with the present and its needs to devote as much time to these matters as we ought, and while the names of our distinguished physicians and surgeons remain present in our minds, their achievements have often been forgotten. For this reason we owe a debt of special gratitude to our distinguished countryman, Dr. Clarke, for the laborious and scholarly task he has accomplished in setting before us the contributions Americans have made to medicine, and for the very interesting way in which he has presented his work.*

There are some points, however, in his article which touch upon the ever-vexed question of medical education, in which he seems to have given rise to misunderstanding in some quarters, if he has not laid himself open to criticism for the very favorable comparison which he draws between our system of teaching and those in vogue elsewhere. Living as the author does under the very shadows of an institution whose pre-eminence above the other medical schools in the country is a fact that few will be willing to deny, we can hardly believe that he regards the condition of our schools in general as satisfactory. In so far as he says that "our medical schools are an honorable contribution to the medical work of the century," we are quite willing to agree with him; when, however, he adds that "if the necessities and different conditions of Europe and America are impartially compared, we shall find that the American method of medical education yields as good a practical result to the nation as the European method of medical education does to Europe," then we confess ourselves sceptical—at least until the proofs are presented.

Dr. Clarke, however, takes care to tell us that "the schools, except in the case of Harvard, ... do not pretend to give a complete education, but only to supplement that which the student gets elsewhere." And then he says, speaking of the quality of the education, that "those who, like the apothecary of England and the Secundär Aerzt of Germany, are charged with the medical care of the mass of the community in Europe, are not better equipped for the practical work of their profession than their average American contemporary." We are unable, however, to see how any system of instruction can be satisfactory if it, except in the case of Harvard, does "not pretend to give a complete medical education." Nor can the comparison just quoted be regarded as flattering. Those who are conversant with the requirements abroad will hardly be pleased to have us informed that the mass of our doctors are fully up to the standard of "English apothecaries" or "Secundär Aerzte" on the Continent. The title of "general practitioner," which is conferred upon the graduates of the Apothecaries' Society, is certainly not an exalted one, and it is this, we take it, to which Dr. Clarke refers. It is one of the very easiest to obtain, and while it confers upon the possessor the privilege of practising, would, in the absence of a better degree, be a very poor certificate of his medical proficiency, if he desired to indulge in the higher order of metropolitan practice or was a candidate for a hospital appointment. A knowledge of surgery is not required for his title, and he need only attend three winter and two or three summer sessions, a remarkably short time in which to get an English degree. As for the class of continental sub-physicians to which Dr. Clarke refers, there are certainly many species differing according to the locality and existing conditions. If he refers to what are known in Prussia as the "Wundärzte," some sort of barber surgeons, their sphere is usually restricted, and if they are found overstepping its limits, they render themselves liable to the authorities in so doing, so that they are not to be regarded as filling the position of physicians in the sense of our ordinary practitioners. The same thing may be said of the French "officiers de santé;" they practise in certain defined departments, but in grave cases are compelled to call in the aid of a "docteur en médecine et chirurgie." But it is really mortifying to compare the requirements of even the best of our colleges with that of a really first-class degree, as for example a fellowship in the Royal College of Surgeons, or the title of Doctor in Prussia. To become an F.R.C.S. (and it is a very necessary thing to obtain if one would hold some of the higher positions in England) he must show evidences of having been suitably prepared for the study of medicine, must have studied six years, and have had a prescribed course of medical and surgical training in a hospital, and have success-

* "A Century of American Medicine," Am. Journal of the Med. Sci., Jan., 1876.

fully passed a rigorous examination. No one of our colleges exacts such severe conditions for a degree. And yet some of them hardly require half as much as is demanded even by the Apothecaries' Society. To obtain the title of Doctor in Prussia from the regular examining bodies requires satisfactory evidence of preliminary study, and a university education. The applicant must further pass satisfactory examinations in anatomy, physiology, chemistry, physics, and some one or other of the natural sciences, such as botany, as well as in surgery, ophthalmology, materia medica, obstetrics, diseases of women, and medical jurisprudence or hygiene. He must also have passed a prescribed time in attendance in the surgical and medical wards of hospitals, and have attended at least four confinements.

One of the most interesting and instructive books that have ever appeared on the matter of medical education is the one that Billroth * has lately written, and it will well repay careful study for any one who can read it in the original.

He tells us that there are in Germany, as we know there are here, two classes in the medical profession; one that would throw down the bars and make the acquisition of medical degrees an easy one, and another class that would insist upon stringent courses of study, making them more thorough and complete in proportion as general knowledge and culture advances. The arguments used are the same the world over. The one class says that the present requirements in Germany, and such as are urged upon our adoption by many in this country, are unnecessary. "Physicians have no need to be literati;" they need first of all to learn how to treat the sick; in fact the best educated men are often unsuccessful practitioners, while ill-educated men may have large and flourishing practices.

It is also urged that physicians are unfitted by high degrees of education and culture to practise among the lower orders, especially in the country places, for these people are better satisfied with those who are nearer them in their attainments, and can therefore sympathize better with them.

Besides, they say, the difficulties that are interposed between the student and his diploma will have the effect of frightening away many from the profession, and thus in time there will get to be an actual want of physicians. The expense of a full course of medicine is too great for the poorer students.

And finally they ask, Where is the money to come from if the system of instruction is going to continue to be so expensive?

Billroth answers many of these arguments so well that we insert in substance what he says:

In the first place medicine must either be progressive or retrogressive; it cannot stand still while other kindred branches of science are moving forward. It is by the study of the natural sciences especially that we are making progress; they, in fact, have given us the ophthalmoscope and taught us electrotherapy; while the application of the higher mathematics to the doctrines of light and sound have been very necessary in developing our present knowledge of the mechanism of sight and hearing. It is, in fact, the natural sciences which are now pushing us forward most rapidly in the diagnosis and treatment of disease. This is the very point Dr. Clarke makes when he tells us that the founders of modern physiology and pathology—John Hunter and Bichat—rescued medicine from empiricism by perceiving its relations to the natural sciences. And so it has been in this country, for though many an ill-educated man has had successful practice in the common sense of the term, those who, like Rush, Physick, Warren, and twenty others that we might mention, have not only been successful as practitioners merely, but have left an indelible impress on the medical history of their times, have been men of broad and liberal education, fully up to the scientific knowledge of the times, of which their contributions were the fair and legitimate offspring.

So far as its being undesirable that a physician should be a man of high education and culture, because he cannot then be on a par with his patients, the reverse is the case. The physician actually accomplishes more if he stands on a higher level, and in fact this is one that he has usually occupied even in the humble avocation of a village doctor; while he is most apt to be guide, philosopher, and friend to the lowliest of those he is called upon to treat.

As for the danger of frightening away students by the increased difficulties in obtaining a diploma we need have no concern; for notwithstanding the threatenings which have been made in Europe for some years back, Billroth tells us that the number of students has been rapidly increasing at the German universities, especially since 1867, and the same is true in this country, we have every reason to believe. In regard to the expense which long courses entails upon students, Billroth has the boldness to say in effect "then do not study medicine." The study of medicine of to-day is of such a nature that it is folly to think of embarking in it with the hope of being a successful practitioner without a very considerable outlay of money, so as not only to carry the student through the necessary curriculum, but well out into the first years of his practice. He inveighs against a class of students, which fortunately we do not see in this country—poor Jews from Hungary and Gallacia, who go to Vienna with the notion that they can acquire a degree by study, paying their way by working as telegraph boys, post-boys, selling matches, and the like; the fact being that they cannot earn money sufficient to buy the necessary books, or take the necessary courses, and therefore pursue medicine under

* Ueber das Lehren und Lernen der med. Wissenschaften. Wien, 1876.

the greatest disadvantage. They begin the practice of medicine only to be sorely disappointed by finding that they have no practice, and can get none that will yield them sufficient support, and therefore have to resort to some other means for their livelihood, at least for the first years of their practice, which should be spent by them in further perfecting themselves in the art. There is doubtless much truth in this which may be applicable to many students in our own country. The student of medicine requires imperatively so many adjuncts to his ordinary studies in the way of books and instruments, and should take so many special courses, that the expense, even in this country, is vastly greater than it used to be.

But if the question be asked where is the money to come from to sustain an elaborate system of education, we answer by *endowment*. If we satisfy the laity that medicine is a science as well as an art, and that it is actually developing itself by the discovery or application of new facts, in the same way as other branches of natural science, we shall at least command their sympathy, and may secure money for the proper establishment of such institutions as are now flourishing in Europe.

But there is another project which is now coming into notice, the aim of which is in the right direction, and promises most beneficial results. It is examinations of students by proper persons in each State, independent of the colleges. We cannot expect much benefit from legislation and legislators. They recognize the regular practising physician, the homœopath, and the eclectic as equal before the law, and perhaps nothing else can be expected. We can, however, do one thing—set our own house in order, and show the standard of attainment that we recognize as requisite for practitioners, and if the requirements be high enough, we shall soon have the credit for it. Make it creditable, and every young physician coming to practise in the State, and perhaps not a few in other States, will find it greatly to their advantage to have our State diploma. As it is with the F.R.C.S., so it can be with the diploma given under the auspices of our State Medical Society. Other medical bodies with a lower grade of requirements will soon be recognized as such by the public, and will soon hold a correspondingly lower position in public esteem.

There can be no great difficulty in organizing such a board from the members of the State Medical Society. As it will be more creditable for the medical colleges of the State to be in a minority, let the majority be non-college men. They then may meet and elect an examining board to serve for the year, sitting twice a year, at times agreed upon by themselves. Fixed rates of fees can be established in accordance with the time spent in examinations. Proper supervisors may also be appointed to attend at the examinations, and decide upon points of difference as they may arise. The diplomas thus issued may then be publicly given, as now, at the regular commencements of the colleges. Such a step as this would be the first one towards a uniform standard of requirement for graduation. If the standard were found to be too high for many who would otherwise be excellent practitioners, and the country were really in need of them, then it might be time for considering the question of a lower degree, as of M.B., or Bachelor of Medicine, much in the way that it is given at Cambridge or Oxford. We have, however, no desire to extol the cumbrous systems still existing in England, the stupid conditions that are enforced upon those who seek a license, and the endless array of titles, which, doubtless, are full of hidden meaning to the happy possessor, but of no earthly account to the great majority of his fellow-beings. What we do urge, however, is, that we do at least have one high standard for our M.D.'s which the holder may be proud to obtain and we to give. If our examining board should, however, find it advisable to grant a lesser degree, let it be distinctly known as such, and that the holder, whatever his title, is not an M.D., but a star of lesser magnitude.

MEDICAL ADVERTISING.

It is indeed a difficult and thankless task to plead for honesty in the face of the present determination of certain medical men in this city to ignore the obligations which they owe to the profession, and to dodge a strict compliance with the code of ethics which they have pledged themselves to support. But we still believe that there is enough of the right sort of feeling with the majority of our brethren to support us in our endeavors to correct a growing evil. Even at the expense of being considered radical on the subject, we have considered it to be our duty to oppose medical advertising in any shape, directly or indirectly, admitting of no compromise between what we believe to be right and what we believe to be wrong. Already we have been forced to say a great deal on this subject, but it seems that the end is not yet. Examples for criticism are being constantly thrust before us, which either compel us to notice them or give up in despair. The latest one of the sort is that of the Public Health Association, which we are pained to see offers a very convenient medium for public notoriety to some of its members.

We have no desire to question the motives of gentlemen who wish to educate the public on matters pertaining to health, but they owe it to their brethren to be extremely careful how they accomplish their object. In order to do this properly they should be above the suspicion of benefiting themselves individually in a purely professional way before the public. That they have failed in any such endeavor which they may have had is quite apparent from the proceedings of the last meeting. On that occasion the subject of diphtheria was before the Society- certainly a very interesting

one for the public. Instead, however, of presenting it in its proper light, and confining the discussion to preventive measures, an elaborate and strictly medical paper was read by one of the members, so full of technicalities that even the reporters of the daily papers could not understand its purport, and this was followed by the experiences of certain members in regard to its treatment. What is the natural effect of this upon the popular mind? Simply to prove that these gentlemen were the leaders of medical thought upon the subject, and were, if not the only ones who understood the disease, at least among the few who could be trusted in its management. There can be no excuse offered for misconceiving the object of the meeting. It was avowedly a public one, and the discussions were intended for a popular audience.

The meeting was openly advertised in the daily papers; the names of the gentlemen who were to take part in the proceedings were given in connection with the subject to be discussed, and the reporters of the daily press were invited to attend. As a natural consequence a report of the proceedings was given the following morning in the various city papers, and there was the usual mortification of seeing one's name in the public prints.

As the discussion of the subject is likely to be continued, opportunities will doubtless be offered to some of the other medical members of the Association for giving their extensive experiences in the treatment of this very interesting disease.

OVERCROWDING IN THE SCHOOLS.

The overcrowding in the primary departments in our public schools is in some degree due to the practice, among parents, of literally converting these institutions into mere nurseries for the smaller children. It seems, however, that the school authorities have no power to prevent this, and the children who are old enough to learn suffer in consequence. The President of the Board of Education recently remarked, that if he had his way he would allow no child under six years to attend school. He is evidently the right man in the right place.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, March 2, 1876.

Dr. S. S. Purple, President, in the Chair.

Previous to the reading of the paper, Drs. J. E. M. Lordly, S. A. Raborg, Clinton Wagner, C. G. Stanley, A. B. De Luna, W. H. Katzenbach, Edward Bradley, and Matthew D. Mann were elected Fellows of the Academy.

The Librarian acknowledged the reception of an exceedingly valuable donation, made by Dr. Isaac E. Taylor, consisting largely of old and rare medical works, the more notable of which were the following: The works of Ambrose Paré, 1634; Anatomical Exercitations concerning the Generation of Living Creatures, by William Harvey, 1653; Complete Body of Chemistry, by Febare, 1670; Carswell's Illustrations of Pathological Anatomy, 1838; Bailles' plates, illustrative of pathological anatomy, 1799; Hebra's plates, illustrating diseases of the skin, 8 vols.; Bright's Reports of Medical Cases, with colored plates, 1827 to 1831, 3 vols.; Hooper's Morbid Anatomy of the Uterus, with plates, 1832; Albinus on the Bones of the Fœtus, with plates, 1687; Ricord's Complete Treatise upon Venereal Diseases, with colored plates; Cruveilhier's Pathological Anatomy, 1821, 2 vols.; Bateman's Delineation of Cutaneous Diseases, 1829; and 33 volumes of medical works, written by Boerhaave, Mead, Hoffman, Celsus, Miller, Paul Barbette, Haygarth, Otto, Rayer, Cheyne, etc., etc. The value of the donation was nearly $1,000. The reception of 100 periodicals from Dr. J. R. Leaming was also acknowledged.

Drs. Anderson and Adams introduced resolutions for the purpose of reorganizing the Sections on Chemistry and Public Health.

IS CRANIOTOMY, CEPHALOTOMY, OR CRANIOCLASM PREFERABLE TO CÆSAREAN SECTION IN PELVES OF 1¾ TO 2¼ INCHES? WITH A CASE OF LABOR IN A KYPHOTIC PELVIS OF 1⅞ INCHES.

Prof. Isaac E. Taylor read a paper upon the above question, which was the second part of the subject considered at a meeting of the Academy, held Sept. 15th, 1875.

Reference was first made to the mortality attending Cæsarean section, and from an examination of the statistics given by English, German, French, Belgian, Italian, and American operators, and also from Radford, the average was found to be 53 per cent. The figures of Dr. Harris were mentioned, in which only $26\frac{3}{10}$ per cent. of the cases terminated fatally, while something more than 80 per cent. of the children were saved.

Dr. Taylor recognized the fact that the success of this operation is materially influenced by delay, and is much more unfavorable when resorted to after the woman has become exhausted, than when performed before the strength has flagged to any great extent. With regard to craniotomy, cephalotripsy, etc., the success of the operation is influenced by the period at which it is performed, presence or absence of complications, condition of the mother, choice of instruments, correct principles of delivery through the different parts of the pelvis, etc., etc. Too great delay is culpable, and is the cause in very many cases of unfavorable results. Indeed, to delay is to contribute to bad results in all these formidable operations, for then we have to contend with exhaustion and a peculiar nervous condition which is of bad import.

Prof. Taylor then gave a detailed account of his case of labor in a kyphotic pelvis, contraction at the inferior strait, where there was no evidence of rachitis or malacosteon, and which measured 1⅞ inches. Delivery was accomplished with safety to the woman, the child weighing 11 pounds. The cephalotribe which Prof. Taylor employs is his own modification of the French instrument; the modification consists in its being made lighter, less curved, and more serrated.

In this connection the cases reported by Jones were studied with reference to their duration, when it was found that the average was 45 hours. The nature of the operation, said Prof. Taylor, is not to be blamed if it is too long delayed and improperly performed. Every

hour after rupture of the membranes entails danger to the mother. Dr. Taylor does not employ the cephalotribe or cranioclast as tractors, although more or less traction may be made with these instruments, but, as a rule, other instruments must come in to complete the delivery. The doctor has an aversion to the crotchet, and gives preference to the right-angled blunt hook. The cephalotribe and cranioclast are not *alone* sufficient to accomplish the operation, nor will the cephalotribe be superseded by the cranioclast.

Prof. Taylor then referred to cases in which he had effected delivery when the superior strait was contracted to 2 inches. In these cases he believes he has derived great advantage from turning the occiput to the posterior part of the pelvis; that is, the back of the child to the back of the mother. His operation by preference in these cases is version, and then perforation of the head, followed by such other instrumental procedure as the nature of the case may demand.

The advantage claimed for bringing the occiput posteriorly, was that perforation and the subsequent steps of the operation can be much easier performed from behind, than to be obliged to force a passage through the jaw for the purpose of emptying the cranial cavity. The method of performing version commonly resorted to by Prof. Taylor, is what is known as the two-finger method; that is, two fingers introduced through the cervix are aided by external manipulation.

"There is no reason," said the doctor, "why we should not resort to version in extreme cases, instead of allowing the patient to go on, for the woman can be delivered in a much shorter time than by the Cæsarean section, and with more safety." Version is the important item in the management of these cases, and is the peculiarity of Prof. Taylor's method.

In cases of labor where the pelvis is contracted to the extent under consideration, four methods of management have been given:

1. The ordinary method, craniotomy, cephalotripsy, cranioclasm, and traction by the cephalotribe and cranioclast.

2. Craniotomy, complete cephalotripsy, with destruction of the vault, making the head a face presentation, and to be delivered edgewise. Bary and Hull.

3. Craniotomy, partial or complete cephalotripsy, delivering the head sidewise by craniotomy forceps, a crotchet, or blunt-hook. Osborne.

4. Craniotomy, cephalotripsy with or without cranioclasm, and version performed directly after with the trial of the blunt-hook, or crotchet or forceps, whichever may be elected.

From the observations Prof. Taylor has made, he has arrived at the following conclusions:

1. That a mutilated child can be delivered with safety to the mother through a space of 1¾ in. anteroposterior, and 2½ or 3 in. transverse diameter, by craniotomy, cephalotripsy, or cranioclasm, when the vault has been destroyed, the face made to present edgewise, or the head sidewise.

2. That after cephalotripsy, or cranioclasm, if necessary, version with propulsion from above the pubes, early performed before the uterine forces are exhausted, is preferable to that just indicated.

3. That the cephalotribe or cranioclast cannot be considered as available tractors in cases of extreme contraction of the pelvis, but that other instruments become necessary to properly effect the delivery of the woman.

4. That the Cæsarean section should not be performed when contraction or deformity is present, as stated above, unless demanded by other conditions and complications.

Prof. Pallen remarked that the statistics concerning the mortality attending the operation of craniotomy, cephalotripsy, etc., were something horrifying; and while it may be true that the success can be materially improved by performing the operation at an earlier period in labor, yet he was of the opinion preference should be given to gastro-elytrotomy when the contraction of the pelvis is less than two inches. By resorting to this operation, the dangers attending Cæsarean section are avoided, such as hemorrhage, septicæmia, metritis, etc. Prof. Pallen was of the opinion that the statistics upon Cæsarean section are about as favorable as those found in connection with craniotomy, and certainly a large proportion of children are saved by the former operation.

He also regarded version as much safer in labor with a pelvis of three inches conjugate diameter than delivery with forceps. In the class of cases, however, mentioned by Prof. Taylor he favored the operation of gastro-elytrotomy as revived by Prof. T. G. Thomas, of this city, rather than resort to the use of cephalotribe or cranioclast.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, February 25, 1876.

Dr. E. G. Loring, President, in the Chair.

REPORT UPON DISEASES OF THE THROAT.

The regular monthly report was made by Dr. Beverley Robinson, and embraced brief and concise references to a large number of subjects which have engaged attention during the year 1875. We can refer to a limited number only of the more important items.

Heitler has mentioned adenoid tissue in the mucous membrane of the larynx as a cause of catarrh and ulceration.

Dr. Bigelow, of Boston, has drawn attention to erectile tissue covering the inferior and middle turbinated bones, and it is claimed that the mucous membrane may, in consequence, be increased in thickness one-fourth of an inch.

Schroecker was quoted in favor of tubercular laryngitis being secondary to tuberculosis of the lungs.

Morbid condition of the bronchial glands in chronic whooping-cough was mentioned as a probable condition to account for the long duration of certain cases.

Auscultation of the œsophagus in front, for the upper portion and over the spine, or to the right, for the lower portion. Spasmodic dysphagia is unknown to the stethoscope.

Ozæna is almost always of a scrofulous or syphilitic nature

Politzer was quoted as speaking of vegetations in the pharynx, and reference made to the removal of the adenoid enlargements by excision.

Dr. Robinson expressed his disapproval of the operation for extirpation of the larynx under any circumstances.

The article in Ziemssen upon diphtheria, was quoted from, but Dr. Robinson objected to the use of vapor inhalations, for the reason that they are difficult in children, and in adults they are of doubtful efficacy. He believes that they aggravate rather than benefit, and should not be employed. Cubebs and other resinous substances were recommended. The doctor also entertains the belief that membranous laryngitis and diphtheria are identical.

A solution of sulphate of quinine, two grains to the ounce of an acidulated menstruum, was mentioned as a local application in cases of diphtheria and inflammatory sore throat, and had been attended by quite favorable results.

Dr. R. P. Lincoln remarked, with reference to the presence of adenoid tissue in the vault of the pharynx, that latterly he had employed chromic acid for the destruction of the enlarged follicles, in preference to nitrate of silver, or removing them with any cutting instrument; but that still later he had used the galvano-cautery for this purpose with the most satisfactory results. He has been able, by means of this cautery, to treat successfully, with two or three applications, cases which required a large number of applications of chromic acid, and the cautery is also much less painful.

Dr. Bennett exhibited instruments for spraying the nasal, pharyngeal, and laryngeal passages, and claimed for them that all parts of the nasal passages can in this way be reached.

A running discussion here ensued, in which Dr. Robinson maintained that it was an illusion to suppose the nasal passages could be reached in every part by a spray, especially in certain acute and chronic cases, in which there is a large amount of swelling of the mucous membrane, etc. He also objected to the use of spray in general in the treatment of this class of diseases.

Dr. Bennett maintained that in the cases to which reference had been made, there was usually no necessity for spray until the condition of the mucous membrane has been changed by constitutional treatment and other means. If necessary, however, the fine tubes can be pushed through between the swollen parts, and in some cases it might be demanded.

Dr. McIlvaine entered his protest against the doctrine of blood-poisoning. He maintained that the blood had received a complete chemical analysis, and then asked the question, Which element is affected in those diseases said to be due to blood-poisoning, such as diphtheria? He regarded the idea as a relic of the dark ages.

On motion, the Association adjourned.

Correspondence.

THE APPLICATION OF MEDICATED SPRAY TO THE GENITO-URINARY TRACT.

To the Editor of The Medical Record.

In The Medical Record of the 11th inst., Dr. Bradley calls attention to the value of atomized applications to the mucous membrane of the genito-urinary tract. He seems to urge this mode of treatment upon his professional brethren, and rather complains that although he called attention to it a year ago, it does not seem to have met with much favor.

Unless there is some unexplained mode of making the application, further than appears in his article in The Record, I apprehend that there are many whose preconceived notions of the anatomy of the parts referred to would prevent their even experimenting in this direction.

The instrument used in making the applications has a very familiar appearance, being apparently the common hand-ball atomizer, with what might fitly be termed a *modification* of the *tube* to adapt it to the conformation of the particular parts to be reached.

The illustration represents the spray as flying freely in all directions, and for some distance from the nozzle of the instrument, indicating that the spray, *as such*, impinges upon the membrane lining the parts referred to, viz.: the uterus, vagina, and bladder.

As Dr. Bradley proposes to give further details in some future article, will he kindly make clear one or two points that have arisen in the minds of some who have had no experience with this mode of application.

Are not the walls of the uterus, when not occupied by the products of conception—of the vagina in its ordinary state, and of the bladder when the urine is evacuated—so approximated as to leave no open cavity? Or, as Dr. Bradley gives us to understand, is the bladder when emptied of urine distended with air?

If, as many teach and many more believe, the walls of these hollow organs when not distended with their natural contents are in apposition, how much "spray" can be thrown upon every part of the viscus to be medicated?

If, therefore, what I think is the general belief respecting the condition and position of the parts referred to is true as a matter of fact, however beautiful the *theory* of the application of medicated "spray" to the genito-urinary tract, there seems to be a very obvious mechanical impediment in the way of its practical application.

When these old-fashioned notions are clearly shown to be wrong, and it is fairly demonstrated that "spray" is really applied to the parts designated, I see no good reason why medical men should longer hesitate to experiment with this method of treatment.

Benj. Edson, M.D.

140 Park Place, Brooklyn.

THE ELECTROLYTIC TREATMENT OF TUMORS.

To the Editor of The Medical Record.

Sir:—I have read, with much interest, Dr. Neftel's paper on "The Electrolytic Treatment of Malignant Tumors," in No. 278 of The Record, and sincerely hope that the "brief reply to the inquiries of some of the numerous readers," etc., is more satisfactory to others than to myself. We are told that "the most malignant tumors (cancers, etc.), at a certain stage of their development, can be radically cured by electrolysis, employed according to certain methods," but we are not informed what these *certain methods* are. The histories are related very imperfectly, where we are assured that the author effected cures in apparently hopeless cases. But he does not go into minutiæ, promising to do so in a separate monograph. Having owned for the past six years a part of this same work (I suppose), which was published separately, and the preface of which says the rest was then "preparing for publication," I fear that the American public may lose many valuable lives before its appearance.

On reference to Virchow's *Archiv*, vol. 57, 1873, we find that a paper had been published in vol. 48, 1869, reporting the case of Congressman T. T. D., and "the case gave rise to much misunderstanding, as I had published it very incompletely, proposing shortly to issue a very complete work on the subject."

In vol. 57 of Virchow's *Archiv*, the case of Mrs. H. (given in The Record, No. 278) is more fully reported, the *exact* line of treatment pursued being given. This may be either because our German brethren, being further advanced than ourselves, are better able to appreciate the improvements recounted, or because they will not so readily put up with half-finished journal articles.

Perhaps it might be as interesting to your other readers as it was to myself, to know what the "certain method" in this case was.

While Mrs. H. was under chloroform, three negative needles were introduced into the tumor, and a large positive electrode applied at some distance from the tumor; a current from 35 Siemens' elements was applied for 30 minutes. This was done April 19 and 28, May 2 and 6. From May 8 to June 10, the patient was treated daily with weak currents; a small plate-shaped negative electrode, covered with a moist cloth, being applied over the tumor, especially over the punctures of the electrolysis needles, and a similar positive electrode being applied at some distance for a time, then changed around. From six to ten elements were employed for fifteen to thirty minutes.

This account having been published in a German journal some three years since, and "reprinted in the leading journals of Germany, France, England, etc.," there certainly can be no impropriety in my quoting it here.

Yours, etc.,

C. E. H.

New Instruments.

AN IMPROVED FEVER THERMOMETER.

Messrs. F. G. Otto & Sons have contrived a self-registering thermometer, which promises to be of service to the practitioner. Its peculiarity of construction is such that there is no danger of losing the register by contact with the mercury in the bulb. This is such an annoying and oftentimes unaccountable accident, that any device calculated to make it impossible will be considered as a real improvement. It is proposed to prevent the descent of the register below a certain point in the tube, by means of a slight enlargement of the bore a short distance above the bulb. This is, so to speak, a supplementary reservoir, B, which is capable of holding the small pencil of mercury, and not allowing it to go farther, despite the most violent jarring. In addition to this, there is another contrivance which enables any person of ordinary skill to make a register for himself. Although this is obviously unnecessary in the instrument before us, it can serve as a very useful modification to the ordinary plain-bore tube. It consists of a globular excavation at the end of the tube, and continuous with the canal. Suppose the register is lost, that is, the small pencil of mercury has attached itself to the main column in the bulb. The tube is cautiously heated until the column of mercury is forced to the extremity and partly fills the excavation; a gentle tap with the finger detaches that part of the mercury already in the excavation, or cell, and the main column is allowed by the cooling of the tube to recede. Next the detached portion of mercury is shaken into the tube, or driven downwards by gentle heat, and the registering pencil is made.

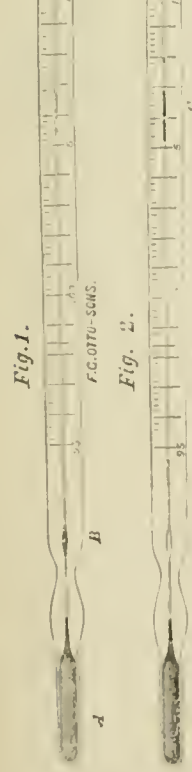

Fig. 1.

Fig. 2.

The cuts represent the register in the reservoir, and in the body of the tube respectively.

ARMY NEWS.

Official List of Changes of Stations and Duties of officers of the Medical Department, U. S. Army, from March 5th to March 11th, 1876.

Kimball, J. P., Assistant Surgeon.—Assigned to duty as Chief Medical Officer, with the troops in the field under command of Lieut.-Col. Geo. A. Custer, 7th Cavalry. S. O. 27, Department of Dakota, March 2d, 1876.

Medical Items and News.

Jefferson Medical College Alumni Association.—The annual commencement of the Jefferson Medical College took place March 11th. The degree of Doctor of Medicine was conferred upon one hundred and forty-six graduates. Professor William H. Pancoast delivered the valedictory address.

At the last annual meeting of this alumni association, Prof. Gross was elected President; Drs. W. C. Atlee, Elwood Wilson and J. M. Nolty, Vice-Presidents; Thomas H. Andrews and Richard J. Dunglison, Secretaries; and Prof. B. H. Rand, Treasurer.

Presbyterian Hospital.—The letter of resignation of Miss Woolsey, Resident Directress of Presbyterian Hospital, which has been under consideration by the managers of that Hospital for more than one year, was accepted at the last meeting of the Board, to take effect at the end of the year, in April. Dr. William T. White has been elected one of the attending surgeons.

Statue of Prof. Stokes, of Dublin.—The statue to Prof. Stokes, which has been placed in the Examination Hall of the Royal College of Surgeons, was unveiled on the 16th ult. He was president of the College in 1849. This is the third statue which has been erected in the hall, the others being those of Sir Dominic Corrigan and Sir Henry Marsh. A vacant corner is intended for that of Dr. Graves, the statue of whom is now in the hands of the sculptor.

Reduction of Salaries of the Health Board.—A bill is now before the State legislature for the reduction of the salaries of the city officials. It is proposed to reduce that of the President of the Health Board from $7,000 to $4,000 per annum, and that of the other commissioners from $6,000 to $3,000.

Army Medical Service in England.—There is a great deal of anxiety manifested concerning the proposed bill for the short service term. The measure is strenuously opposed by the profession and the medical press.

J. G. Adams, M.D., has been appointed Centennial Orator for the N. Y. Academy of Medicine.

Death of Andral.—Gabriel Andral, the eminent and venerated French physician, died on the 13th of February last, of bronchitis, at the age of 79 years. He was honorary Professor of the Faculty of Medicine in Paris, Member of the Institute, and of the Academy, and Commander of the Legion of Honor.

American Clinical Lectures.—Professor Roberts Bartholow, of Cincinnati, opens the second vol. of this series with an article on "The Principle of Physiological Antagonism as applied to the Treatment of the Febrile State."

Lectures on the Pathology and Treatment of Diseases of the Central Nervous System.—Dr. Eugene Dupuy will deliver at the College of Physicians a course of lectures on the Pathology and Treatment of the Diseases of the Central Nervous System, commencing March 21st, at 8 P. M., and continuing on every Tuesday and Thursday thereafter until completed. The course will comprise six lectures, fully illustrated by experiments, and will be free to the profession.

Analysis of Railroad Accidents.—In analyzing the many causes of accidents on railroads, a leading English authority has just stated, in a paper read before the Royal Institute, that human machinery was responsible for forty-one per cent. of these accidents, defective signals for twenty-eight per cent., defective roadway for eighteen per cent. and defective rolling stock for thirteen per cent. Taking a length of ten miles of railroad, for one passenger to be killed on this extent of travel, from causes beyond his control, he would have to travel some two hundred million eight hundred and ninety-six thousand miles before losing his life. If a person, then, was to travel ten hours a day, at a speed of thirty miles an hour for each of the 365 days in the year, he would probably be killed at the end of 1,835 years.

Medical Alumni Association of the University of Michigan.—The Medical Alumni of the University of Michigan organized last year, and the following officers new elected: President—R. C. Kendzie, Lansing; First Vice President—B. Barnum, Jackson; Second Vice-President—J. J. Mulheron, Detroit; Third Vice-President—I. E. Brown, Monroe; Fourth Vice-President—C. N. Metcalf, Eaton Rapids; Fifth Vice-President—W. J. Herdman, Zanesville, O; Secretary—W. F. Breakey, Ann Harbor; Treasurer—John Kapp, Ann Harbor.

The next meeting will be held the evening preceding the Commencement exercises. It is urgently requested that all who learn of the organization will promptly forward to the Secretary their own address and that of any Alumni they may know; also the names of any they may know to have died, with any interesting facts of their professional lives, and of the time and place and circumstances of their death. And that all who cannot meet with us will send some greeting to those who attend. Notice of the place and hour of the business meeting and of the supper will be given, and it is expected that a large number of Alumni will on this and each succeeding anniversary of their professional birth visit their Alma Mater and greet old friends.

American Medical Journalism.—The editor of the *Boston Medical and Surgical Journal* says:

"A glance at the list of our present periodical publications will show a peculiarity which is in marked contrast to those of other countries. Each separate medical community, however diminutive in proportions, is usually provided with a journal of its own. Most medical schools, particularly those whose qualifications for their work are of an uncertain character, consider an 'organ' a necessity. The result is a series of journals of purely local character, whose very names, in the majority of cases, are unknown beyond the moderate limits of their circulation. Our basis of classification may be considered rather geographical than scientific or literary. Indeed, the latter qualifications appear to be quite secondary to local interests. No sooner is the 'organ' fairly established than rival interests feel the need of protection, and an opposition journal springs into existence. The small stock of material which a busy community can muster can be divided between the two, and the gaps are filled with a large amount of borrowed plumage, while editorial space is devoted to a petty warfare, from which the cause of medicine receives but little benefit."

Pennsylvania State Board of Health.—An act has been passed by the Senate of Pennsylvania, and is now before the House of Representatives, for the creation of a State Board of Health, to consist of five physicians, to be appointed by the Governor. The duties required of them are *onerous*, and they are to receive *no salary*, but the actual personal expenses of any member while engaged in the duties of the Board shall be allowed and paid. Eight thousand dollars are appropriated for the purposes of this act and the expenditure properly incurred.

The editor of the *Medical News and Library* comments as follows: "The provisions of this act do not seem to us to be very promising of useful results. Gratuitous labor is rarely well performed, and to require services of physicians that would not be demanded of any other class of citizens is altogether unjust and unworthy of a rich State. It is also to be feared, that, as the appointment of the members of the Board rests with the Governor, political influence rather than merit will govern the choice."

Death of Dr. Z. W. Scriven, of Long Branch.—Dr. Scriven died suddenly on the 11th ult. One of his professional friends thus writes of him: "His sudden and unexpected demise has caused a gloom not only over this community, but to the hearts of the many of our transient visitors, who had learned to love him as a man and hold him in high regard for his devoted attention and professional ability. Possessing a vast fund of general knowledge, together with a generous, loving, and genial disposition, he had by an arduous practice of twenty-three years gained the confidence, commanded the respect, and endeared himself to the hearts of this community, and especially to the writer.—G."

Vital Statistics.—In the Bureau of Vital Statistics for the past week there were reported 679 deaths, against 651 for the week previous. The increased mortality was due chiefly to diphtheria, phthisis, bronchitis, and pneumonia. There was a decrease of six in the number of cases of small-pox.

The New York Dispensary has printed its 86th Annual Report, for 1875. During that year 42,162 patients were treated, and the aggregate number of persons treated since the foundation of the Dispensary is 1,659,950.

Weekly Bulletin of Medical Societies.

Monday, March 20.—Obstetric Section of Academy of Medicine. N. Y. Society of Neurology and Electrology. Pathological Society of Brooklyn.

Tuesday, March 21.—N. Y. Obstetrical Society. N.Y. Dermatological Society. Medical Society of County of Kings.

Wednesday, March 22.—New York Pathological Society.

Thursday, March 23.—New York Medico-Legal Society.

Friday, March 24.—N. Y. Medical Journal Association. Dr. M. A. Pallen. "Perineal Lacerations."

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, March 16th, 1876.

DR. S. S. PURPLE, PRESIDENT, in the Chair.

THE TREATMENT OF DIPHTHERIA.

THE object of the paper read upon the above subject by DR. C. E. BILLINGTON was, to contribute to the proof of the doctrine that the primary disease was a local affection and the source of constitutional manifestations. The doctor admitted that there were many cases which seemed difficult to explain upon this theory, but claimed that the exceptions were too few to weigh against that doctrine, which he couched under three heads:

1st. In the great majority of constitutional cases which have been under his observation, the local affections have been much more severe than in the other class of cases;

2d. The constitutional disease, as he had seen it, had been, not antecedent to, but consequent upon the local affection;

3d. The results of treatment on the principle of local disinfection strongly confirmed this view. The paper was based on observations made in 300 cases, of which 150 were under his own care; and the great majority of all the cases occurred in patients under 12 years of age.

Three elements entered into the study of the treatment of that affection:

1. Contagion; 2. Inflammation, and the formation of the pathological exudation and the accompanying nerve irritation, symptomatic fever, etc.; 3. The resulting specific and septic poisoning.

The indications in the treatment were, 1, to destroy the contagion; 2, to subdue the inflammation, which was most effectually done by removing its cause; and 3, to combat the absorption of the poisonous element from the spot at which the local disease was manifested.

Failing in these essentials, constitutional remedies were useless. In other words, local disinfection was the proper treatment for diphtheria. The physician should aim to destroy the poisonous exudation and fluids; but, at the same time, should exercise the utmost care, and not irritate the part affected.

That gave rise to two questions:

1. What were the best medicinal agents that could be employed for that purpose?

2. What was the best method of employing them?

The tincture of the chloride of iron was placed at the head of the list of remedies to be used as local disinfectants; and it also possessed other properties, which justly commended it as an agent to be employed in the treatment of diphtheria.

Lime-water, glycerine, chlorate of potash, carbolic and salicylic acid, and sulphite of soda were also mentioned in this connection.

With regard to the manner of employing these remedies for the purpose of obtaining their disinfectant influence, Dr. Billington recommended their internal use rather than topical application by means of a camel's-hair brush, sponges, etc. By that, however, he did not wish to exclude spray and the local use of remedies by means of the soft brush, for these means might be employed in certain cases with great benefit; but they should be used with the utmost care, lest a mechanical irritation should be produced. The following prescriptions were given:

℞ Tinct. ferri perchloridi..... ℥ iss.
Glycerini,
Aquæ, āā..... ℥ i.
M.

A teaspoonful to be given every two hours. For children under two years of age, one drachm of the iron was a sufficient quantity to enter into the prescription. When vomiting was a troublesome symptom, it sometimes became necessary to omit this mixture.

It was also recommended to administer teaspoonful doses of the following mixture, every two hours—that is, alternate with the above; but the administration should come after an interval of thirty minutes.

℞ Potassæ chloratis..... ℥ ss.
Glycerini..... ℥ iij.
Liquoris calcis, ad..... ℥ iij.
M.

The frequency of this dose was insisted upon by Dr. Billington as an item of very great importance.

It was also recommended to give teaspoonful doses of the following mixture, in addition to those already prescribed.

℞ Acidi salicylici.....grs. x to xv.
Sodæ sulphitis..... ℥ ss to grs. xlv.
Glycerini..... ℥ ss.
Aquæ, ad..... ℥ iij.
M.

It was recommended to use the following mixture in the form of spray for several minutes at a time, and just before the administration of each dose of medicine.

℞ Acidi carbolici.....m. x.
Liquoris calcis..... ℥ iv.
M

Applied by means of an ordinary perfuming atomizer. The doctor had found that children under two years of age so resisted the use of the atomizer that it was not available. He also recommended early resort to the nasal douché, and if offensiveness of the breath persisted, the nasal syringe should be resorted to and the salicylic mixture already mentioned.

For tough, unyielding membranes, the following was recommended.

℞ Tinct. of the chloride of iron....two parts.
Glycerini.....one part.
M.

Applied with a camel-hair pencil, but the greatest care should be exercised not to treat the affected parts roughly.

Dr. Billington regarded quinine as worse than useless, especially in young children, except as an agent to reduce the temperature. It was to be used for this purpose only when the temperature remained high after the initial stage had passed. For the high temperature, sometimes present early in the disease, a single dose of calomel was recommended. The doctor also maintained that the great majority of cases required no medication except the disinfectant measures, to which allusion had been made. Taking all the cases, probably 60 per cent. would recover spontaneously. Stimulants should not be used indiscriminately. The patients might have ice freely when they would take it; should be sustained by cold milk, perhaps eggs; and the juices of fruits, and the fruits themselves were regarded as beneficial.

Dr. Billington reported astonishing results, which he had obtained by following out this plan of treat-

ment. Membranous exudation was present in every one of the cases referred to in the paper.

Out of one hundred and twenty-four dispensary cases, there were ninety recoveries. Of these, one hundred and two were under his own care, and eighty-eight recovered. The largest number in a single month occurred in the month of August, 1875. In his private practice, the doctor had had seventeen cases, and all recovered, with but a single exception. Of these, seven were of the severe tendency; the others were mild. The average duration of the doctor's cases was from four to six days. These cases, added to those treated by Drs. Darkin and Bullard, in accordance with the same plan, raised the number to fifty-one, and with but a single death, already mentioned. The inhalation of steam was regarded unfavorably. Dr. Billington believed that he could prevent systemic infection, and also subsequent serious laryngeal complication, by early, thorough, and faithful resort to and continuance of the measures for local disinfection which he had recommended.

The paper was listened to with marked attention.

Dr. Barry, in discussing the paper, remarked that the success obtained by Dr. Billington in the treatment of diphtheria had been wonderful, and that he had not been able to obtain any such results by any plan of treatment he had ever adopted. Dr. Barry was of the opinion that diphtheria was strictly a constitutional disease, and the local manifestation was simply an indicator. His treatment, therefore, was local and general. He discarded the promiscuous use of irritating substances in the throat. Where the amount of exudation was small, he used tincture of iron or muriatic acid with glycerine; and if the patient was of sufficient age, an astringent gargle: alum, chlorate of potash, etc. If the patient was young, the vapor of hot water or vapor of iodine was recommended. In those cases in which the tonsils were pretty well covered, he had been accustomed to use a powder composed of sulphate of iron, chlorate of potash, and muriate of ammonia. This was blown through a quill into the throat every two hours.

His general treatment was supporting in its fullest sense, for the tendency to death was by asthenia. Iron with quinine, chlorate of potash, carbonate of ammonia, milk, beef essence, milk-punch, should be employed. The surroundings of the patient should be cheerful and pleasant; the unaffected children removed, if possible, from the house; the room continuously disinfected; and the sick quarantined. In his cases the ordinary duration had been about two weeks if the patient was to recover. The more acute symptoms passed away in from four to six days; and if the case were to prove fatal, it usually did so about the fifth or sixth day. He had not met with a single fatal case in an adult patient in his own practice.

Dr. Burke was also of the opinion that diphtheria was a constitutional disease with a local manifestation. He also regarded local applications by means of brushes and sponges as harmful. "The mild cases," said the doctor, "would get well of themselves, but perhaps they had better have given them a little cubebs mixed with mucilage." "The malignant cases," continued the doctor, "would die in spite of all treatment."

There was a class of patients between these extremes that could be saved, a certain portion of them, by the use of constitutional remedies, such as quinine, iron, etc. etc.

Dr. Burke mentioned the use of bromine with bromide of potassium, as recommended by Prof. Thomson; and in some cases it had evidently done good, but in many cases it had done no good whatever. He also recommended inhalation of the vapor of lime-water, especially where croupy symptoms became developed.

Dr. Hanks remarked that Dr. Billington's paper was exceedingly interesting to him, for two reasons: first, because of the remarkable success which had attended his mode of treatment; and second, because it was the expression in words of convictions which had been slowly but surely maturing in his own mind during the past fourteen years.

Dr. Billington's success was truly remarkable, for he well knew the type of the disease as it had appeared in the twenty-first ward; having had in his private practice, during the last five years, in that district, from twenty to thirty cases every year. He knew that many of these cases attended by Dr. Billington had been severe, and not a few malignant. Therefore, when the large per cent. of recoveries was considered, a cause must be looked for, and he believed two excellent reasons could be found for this satisfactory result. One was the kind of medicaments used locally and internally, and the other was the great care he bestowed in teaching the parents or nurses the *proper manner* of administering the remedies presented. This carrying out to the letter every little detail has had much to do, more than many had been led to suppose, in the cure of diphtheria.

He wished he could sufficiently emphasize the vast importance, in treating diphtheria, of careful attention to the minutiæ. Many had been, and still were in the habit of looking at the patient's throat, writing a prescription to be taken, ordering a gargle every few hours, and the nose to be syringed twice a day, believing that their directions would be followed. He knew, however, that one-half of the best class of patients even did not receive the full benefit of the medicaments through lack of proper, intelligent nursing.

He mentioned that the paper was interesting to him, because it was the concise and practical expression of views that had been maturing in his mind for several years. He remembered the disease as it appeared in New England fourteen years ago. Then it was not alone a disease of childhood, but adults were frequently attacked, and it seemed to him that nearly one-half the deaths were among those over fifteen years of age. The prize essay of Slade was the only authority for the treatment at that time. They were taught to cauterize the throat, and use severe remedies, etc., etc. He remembered how, while performing the part of nurse for his preceptor, he applied strong nitrate of silver, locally, twice a day, gave strong solution of tincture of iron and quinine, brandy and whiskey, and made external application of poultices of various kinds. About one-half of the patients died, both young and old. When he commenced practice in Massachusetts, the disease was prevalent in a malignant type, and he treated his patients as he had been taught. He could not conscientiously continue the use of strong caustics, and began to use tannin dissolved in glycerine. Also Huxham's tincture with aromatic sulph. acid, in frequent doses, internally, with a little pyrophosphate of iron occasionally. His success was better, and he learned thus that the disease did not require nitrate of silver in the first stage; and never, excepting in the necrotic or ulcerative stage, which appeared in some cases from the eighth to the fifteenth day. Within the last few years he had not changed the internal treatment, except that he had found more quinine necessary in New York than in Massachusetts. For local treatment, he had changed the glycerine and tannin for pleasant solutions of carbolic acid as a gargle, or

equal parts of powdered chlorate of potash and sugar thrown through a glass tube into the mouth and on the affected parts. He liked Dr. Billington's medicaments, and especially his preparation of carbolic acid and lime water, which he used with the admirable little atomizer.

The success of his treatment would not equal Dr. B's, yet he had been led to suppose that it compared favorably with most of his brother practitioners. During the year 1875 he had had twenty-seven cases, with twenty-one recoveries and six deaths. As one of the latter number occurred out of the city, and he saw the patient for the first time after it was too late to do any good, he deducted it in making his per cent., and therefore reckoned this 70+ per cent. of recoveries as a fair record, considering the type of the disease. There was one practical suggestion on which he laid greater stress than had Dr. Billington. He believed he had met with marked success in enforcing a sort of quarantine regulation when the disease had appeared. A careful and thorough disinfection of the room and apartments of the patient and family could not be too strenuously insisted upon. For this purpose he used sulpho-carbolate of lime. He also compelled a persistent administration of the antiseptic remedies, carbolic acid in solution, or pulverized chlorate of potash, to all the unaffected members of the family. In carrying out that régime during the past year, he had had the satisfactory result of preventing the spread of the disease to other members of the family. In several instances where there were four or five small children that result had been attained. In conclusion, he wished to say that we could not be too careful, using all the means our knowledge could command, in preventing the ravages and spread of that fearful disease.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, March 3, 1876.

Dr. E. G. Loring, President, in the Chair.

PERI-NEPHRITIC ABSCESS IN CHILDREN.

Dr. V. P. Gibney read an interesting paper upon the above subject, in which he reported and analyzed the histories of nine cases. Of these, seven terminated in abscess with external opening, and two in resolution. The existence of that affection had been denied by some authors; and, excluding all cases in which the abscess had been clearly of a secondary character, only three cases had heretofore been placed upon record. The ages of the patients, in the cases reported by Dr. Gibney, were respectively, 8, 1½, 6, 9, 3½, 2½, 6, 10, and 2 years. Six were females, and three males. In seven cases no exciting cause could be found. Six out of the nine gave no evidence of struma. In seven cases the abscess (including the three cases reported by others) were upon the right, and in five upon the left side.

SYMPTOMS.

The disease usually began with a rigor, followed by febrile symptoms, more or less severe, loss of appetite, general indisposition, lancinating pains, and the locality of the pain was perhaps not positively determined.

Constipation was always present. There was elevation of the shoulders, a disposition to stand with the body leaning forward, flexion of the thigh, pain in the region of the kidney, tenderness upon pressure, prone position, tumefaction, and, finally, fluctuation. These symptoms, associated with the fact that the attack was an acute one, were regarded as those chiefly to be relied upon in making a diagnosis. Dr. Gibney regarded diagnosis of peri-nephritic abscess in the very young child as impossible. The most prominent portion of the abscess in these cases was situated near the centre of the crest of the ilium, some three or four inches to the right of the vertebral spinous processes. In one case the tumefaction in the right lumbar region was five inches in longitudinal, and eight inches in transverse measurement. In this case jaundice was present. Spasm of the psoas muscle was regarded as a notable symptom, and in the cases reported was relieved in a marked degree after the evacuation of the pus. The practical diagnosis of this affection from hip-disease was not always easy.

While studying some of his cases, Dr Gibney had felt almost prepared to admit the impossibility of making a differential diagnosis between peri-nephritic abscess and caries of the vertebræ. But when a case came under observation in which were present rigors, fever, nausea and vomiting, constipation, loss of appetite, pain in the side, etc., and the attack acute, spinal disease was believed to be very easily excluded. In primary uncomplicated cases the prognosis was favorable, and the treatment consisted in attention to the general condition of the patient; and, as soon as fluctuation became distinct, evacuating the contents of the abscess, either by means of the aspirator or bistoury. Dr. Gibney remarked that he had not derived any special advantage from injecting the cavity of the abscess after the pus had been evacuated.

Dr. Gibney's paper can be found in full in the *Journal of Obstetrics*.

Stated Meeting, March 10*th*, 1876.

Dr. F. P. Foster, Vice-President, in the Chair.

THE PROPER CONSTRUCTION OF GALVANO-CAUTERY APPARATUS.

Dr. H. G. Piffard read an interesting paper upon the above subject, in which he referred to the fact that the treatment of disease by means of the galvano-cautery had been restricted, because of certain inconveniences, such as size of instruments, non-portability, the presence of noisome fumes, etc., etc. These obstacles, however, had been almost entirely removed by instruments latterly devised, the more notable of which were the battery of Dr. Byrne, of Brooklyn, and that of Dr. Dawson, of this city.

Dr. Piffard inclined to give Dr. Dawson's apparatus the preference; consequently, the interest of his paper centred upon the question, Was it possible to construct an apparatus still more powerful (than Dawson's), without increase in size? To this question the doctor gave an affirmative answer, and proceeded to speak of the qualities which a desirable battery should possess. These were the following: It should be in the highest degree portable, reliable, durable, convenient and compact, as far as these essentials could be made compatible with each other. The problem, then, was to combine these elements in such a manner as to give the greatest possible efficiency to the apparatus. Here Dr. Piffard entered into a detailed description of the various portions of the apparatus, the battery, the electrodes, the fluid, the poles, and cord, etc. Dr. Piffard then exhibited a battery constructed in accordance with the principles detailed, and which corresponded with the Dawson battery in all its essentials, except the agitator. To summarize: In Dr. Piffard's, and also in Dr.

Dawson's battery.—for these were the two placed in competition,—platinum was employed as the negative plate; the measurements adopted by Dr. Piffard were nearly the same as those employed by Dr. Dawson; the number of wires (pure copper) in Piffard's conducting cord 500, in Dawson's 125; and Dr. Piffard employed the air agitator, while Dr. Dawson used an agitator which he had patented.

The special points of superiority which Dr. Piffard claimed for his battery were, a larger surface of platinum, hence more electricity, without increasing the size of the apparatus, and the air agitator.

His battery had four negative plates; *i.e.*, two platinum plates, and three zincs in each cell. Dr. Dawson's battery had two negative plates; *i.e.*, one platinum plate and four zincs in each cell, and his conductors contained 125 wires. The platinum plates in Dr. Dawson's battery were somewhat larger than those in Dr. Piffard's.

The strength of the fluid used in each apparatus was the same, but the quantity required by Dr. Piffard's battery was somewhat less than that required by Dr. Dawson's apparatus. The two machines were then brought out for trial, and the same wire, somewhat larger than the commercial, used by each operator.

Dr. Dawson was able to heat it without using the agitator, so that one could simply smell woollen when the two were brought in contact; but with the agitator it was quickly brought to a bright-red heat, which remained for some time.

Dr. Piffard was able to heat the same wire visibly red without using the agitator, and with the agitator close to a white heat, which also remained for some time.

"But," said Dr. Dawson, "why not?—for Dr. Piffard's battery had double the negative surface."

Dr. Piffard remarked that it proved that what he had aimed at had been accomplished.

Dr. Dawson maintained that a battery stronger than his own was unnecessary for purposes of galvano-cauterization.

Dr. Dawson exhibited a battery which Dr. Piffard acknowledged was more powerful than the one he had devised, but at the same time claimed that it was not the instrument against which he had made his competition, for it was not the apparatus which Dr. Dawson had placed upon the market.

Dr. Dawson admitted that it was not the instrument upon the market bearing his name; and furthermore, he recommended that it should not be used for galvano cautery purposes, because it was altogether too powerful, and would destroy the platinum knives too freely.

As the batteries were operated, it was a fair conclusion that the effect produced by Dr. Dawson's agitator was quicker and more durable than that produced by the air agitator employed by Dr. Piffard. It was also quite evident that the air agitator was not in good working order. Dr. Piffard also recommended a single connecting-piece into which all the knives can be fitted. This he regarded as a convenience, for the operator was then able, by means of a pair of pliers, to construct an impromptu instrument from a piece of platinum wire. Some device in the handle for breaking the current, the button-break and others then exhibited, were regarded as essential, for it placed the degree of heat under the immediate control of the operator. The use of blue eye-glasses was regarded by Dr. Piffard as a valuable accessory in some cases, as they protected the eyes of the operator from the dazzle of the heated wires or knives, and enabled him to be more exact in making certain delicate applications.

The discussion was quite sparkling, and at times rather electrifying.

Stated Meeting, March 17th, 1876.

Dr. E. G. Loring, President, in the Chair.

GENITAL IRRITATION AS A CAUSE OF NERVOUS DISEASE.

Dr. A. McLane Hamilton read an interesting paper, in which were embodied the results of observations he had been led to make on account of the frequent occurrence of nervous disease depending upon irritation of the external organs of generation. Dr. Hamilton considered these cases under two heads:

1. Those depending upon reflex irritation, independent of sexual excitement, although the latter might enter as a complication; and
2. Those in which erethism acted as a cause of central disease. This erethism might be continuous or frequently repeated.

The doctor was of the opinion that these causes had much to do with the functional nervous disturbances met with in infancy and childhood, and that these cases were not to be thrown upon the medical scapegoat, dentition, intestinal irritation depending upon worms, etc. But, while recognizing the fact that a new channel for observation had been opened which might lead to a more intelligent explanation of many disorders incident to infancy and childhood, "yet," Dr. Hamilton felt compelled to believe that, with regard to the external organs of generation in the adult, the field was more restricted, especially in the male subject. At this point the doctor proceeded to study the complex character of the nerves which supplied the genito-urinary apparatus, and also the relation which this bore secondarily to the cerebro-spinal axis. In this anatomical study, the fibres of the sympathetic and the cerebro-spinal systems were found to be intimately associated; and this intimacy was manifested in the external organs of generation in both sexes, as seen in the glans penis, clitoris, etc. etc. Arndt was quoted as authority for the statement that the paccinian corpuscles found in the glans penis and clitoris were in some manner connected with the vaso-motor fibres.

Attention was next drawn to the physiological action of the nerves supplying those parts; and from that part of the study, together with the anatomy, the fact had been derived that erection of the penis and clitoris was due to paresis of vaso-motor nerve fibres. That being the case, they ceased to stimulate the vascular walls, dilatation of the blood-vessels occurred, the organ became distended with blood, and an erection was displayed.

Reflex sensations from those parts produced a variety of phenomena, both motor and sensory, which depended upon impressions conveyed to the brain and spinal cord. These phenomena might also be developed by peculiar psychical states.

The general influence which excitement of the external organs of generation had upon the nervous system could be seen by studying the physiological condition, known as orgasm. It was not difficult, now, to understand how pathological conditions might be developed by any disturbance of the normal condition of that anatomical and physiological arrangement.

Carrying the physiological study a little further, the part played by other ganglia and nerves than those immediately connected with the generative apparatus was reached, and psychical, sensory, and motor manifestations found, which showed that the cerebro-spinal system in general was affected. The vaso-motor influence attending an erection might be from remote centres,

as many of these filaments distributed to the penis had their origin in the vaso-motor centre of the medulla. Now, the original sensory impression might be conveyed directly to an inhibitory centre of the cord, and give rise to changes in its vascularity through the medium of the vaso-motor fibres; or the original disturbance of the vaso-motor filaments might be in the organs themselves.

Again, a sensient impression might go directly to the medulla and produce a secondary change in the centres there, chiefly in the way of ischæmia.

Dr. Hamilton then proceeded to the statement of certain other physiological facts which had a direct connection with the pathology of the conditions under consideration. The first was, that gross stimulation, passing from the periphery of a nerve, did not always go to a definite nerve centre, but generally went to a number.

Oft-repeated special impressions would make a new channel for themselves; and a particular variety of irritation might be reflected so frequently upon one spot that the function of the locality would be impaired. We might have, for instance, sensory impressions, certain forms of contraction, and mental disturbances in three different cases as the result of certain external impressions.

Turning attention to the pathological field, there were three things which should engage attention: 1. Sensory impressions at the periphery; 2. Their transmission; 3. The results. Under the first head, the irritation might be painful or purely agreeable, but both were liable to be conveyed to the nerve centres and do harm. Why these forms of irritation should be received and transmitted in a different manner, and why these special nerves received a peculiarly distinct sensation, remained to be explained. The prick of a pin never produced the same result obtained by friction. There was nearly always motor response resulting from the latter morbid impression; which manifested itself either by convulsions of both lower limbs, with a disposition to flexion of the legs and thighs, and marked adduction of the toes; or there might be general movements of both upper and lower limbs. There might be epileptiform convulsions, and there was frequently mental disturbance, varying from simple irritability to confirmed dementia. In this connection, the doctor expressed the doubt that there were any cases of mental trouble, associated with genital irritation, where masturbation, either unconscious or wilful, had not been practised.

Attention was next directed to the various dysæsthesia mentioned by the patients of hysterical tendency, such as coldness and moisture of the glans, or peculiar burning sensations, etc. There was really no such condition, for the temperature of the parts was normal. Patients who made these complaints were nearly always masturbators or suffered from spermatorrhœa. It was also important that the physician should determine whether the condition of the genital organs was primary or secondary; and that led to the consideration of such diseases as myelitis, etc., etc., and their attendant symptoms. With regard to change in physiological functions that might follow a formidable reflex irritation, Dr. Hamilton took issue with Brown-Séquard as follows: Brown-Séquard held that there was first, contraction of the blood-vessels; and second, that there were no nutritive changes. In reply to these, Dr. Hamilton suggested that prolonged spasm or contraction must give way to an opposite condition; and, therefore, hyperæmia instead of anæmia was present. This was the view entertained by Anstie. Dr. Hamilton also believed that secondary nutritive changes were very probable results.

The prominent nervous symptoms which attended continued morbid peripheral irritation sent from the genitals either to the bladder, spinal cord, or medulla were divided as follows: 1. Those expressed by want of muscular power, such as paresis, including paraplegia and partial paralysis of isolated groups of muscles, and the muscular fibres of the bladder. 2. Sensory, such as hyperæsthesia, anæsthesia, and dysæsthesia. 3. Vaso-motor, such as local hyperæmia and priapism. 4. Hyperkinesis, including choreaic movements and transitory contractions. 5. Psychical disturbances, such as loss of consciousness, impairment of memory, irritability, melancholia and dementia. The patient might present many of these symptoms at the same time. In children, various congenital defects and acquired bad habits had preceded the appearance of some of these symptoms; and in adult life they were developed in consequence of venereal excess, which was common, and, more rarely, by stricture and other urethral difficulties. The above acted by inhibitory reflection; and, beside these, there were certain idiopathic and traumatic neuroses of the penis. In the cases which had been reported with morbid conditions of the organs under consideration, attention was directed to phimosis or other genital irritation, and stricture of the urethra. Dr. Hamilton then gave a brief analysis of the ten cases reported by Dr. Sayre, and added the histories of four which had fallen under his own observation. From these cases the following conclusions were drawn:

1. That convulsive movements, more particularly of the lower extremities, the spastic contractions of the flexors of the thighs and legs, were connected in some children with a continued irritability of either the glans penis or the clitoris.

2. That, as a rule, beyond irritability, there were no mental symptoms.

3. That exaggerated power, or hyperkinesis, was the rule.

4. That atrophy or actual paresis were exceptional.

Dr. Hamilton next turned his attention to these nervous conditions depending upon another form of irritation, namely, that associated with sexual excitement. That venereal excesses and masturbation were causes of nervous disease, in the greater number of instances, there could be no doubt. Clinical experience attested that statement. The disease might be a neuralgia, epilepsy, and even insanity. Insanity depending on that cause was thought to be less common among adults than among children. Reference was then made to nervous symptoms depending upon

STRICTURE OF THE URETHRA,

and the opinion expressed that that rarely produced other than local trouble. To his support he brought Drs. Keyes and Sturgis of this city, while Drs. Gouley and Otis held to opposite views. With reference to the cases reported by Dr. Otis, Dr. H. remarked that any long-continued irritation at any peripheral part of the body, particularly where the nerve supply was abundant, might produce serious neuric symptoms. There could be no manner of doubt but that those troubles were not as constant and common as Dr. Otis suggested, was, to his mind, not at all certain. The doctor also disagreed with Dr. Otis as regards the normal calibre of the meatus and urethra; and regarded extreme dilatation, sudden and severe, as very liable to be followed by bad results. It might be assumed, however, that when the meatus was closed after ulceration, or failed to admit a moderately large sound, it should be enlarged. So too with the urethra; very large sounds did more harm than good. Dr. H. was of the opinion that vastly too much importance was attached to irritation of the geni-

tals as a factor in nervous disease; and, while recognizing the important part it might, and often did, play in the production of such derangements, he believed that some were inclined too frequently to remove the foreskin or dilate the urethra, when in one case the covering of the glans was a normal condition, and in the other the canal was large enough to permit the performance of the functions designed by nature.

The paper was discussed by Drs. Gibney, Post, Stein, Ludlum, and Sell.

Progress of Medical Science.

Rheumatism and Traumatism.— M. Verneuil recently communicated to the *Académie de Médecine* some interesting observations on the relations of rheumatism to traumatism, prefacing them, however, with the remark that they were still too few and too incomplete for synthesis. He divided all cases of wounds or operations on rheumatics into three classes: 1st, those in which the injury followed its normal evolution; 2d, those in which the diathesis seemed to manifest itself at the point of injury; 3d, those in which the injury excited rheumatic manifestations. The first class was by far the most numerous, the rheumatism ordinarily creating no special action on the seat of injury, and not modifying the process of cicatrization. In certain cases, however, the diathesis manifested its influence by serous effusions, œdemas, and simple or hemorrhagic congestions of the pseudo-phlegmons, accompanied by intense pains; in a word, by all the signs which characterize the arthritic conditions of wounds. In concluding, M. Verneuil maintained that the facts adduced proved: 1st, that traumatism can awaken a latent rheumatismal diathesis, and extend its manifestations to organs previously respected; 2d, that the most various forms of injury possess this exciting power; 3d, that the diathetic manifestations excited by it are of very different kinds (articular inflammations, cutaneous eruptions, neuralgic pains, pericarditis, etc.). How this exciting power acts in awakening a diathesis; why, once aroused, its manifestations affect one organ rather than another; and why the seat of injury is only occasionally affected, are questions still *sub judice*.—*Gazette Hebdom.*, Jan. 14, 1876.

The Formation of Sugar in Animals.—The following extracts from a paper read by M. Cl. Bernard, before the *Académie des Sciences*, are interesting, as epitomizing the labors and discoveries of the great physiologist on the glycogenic function of the liver.

I. "The blood of man and of animals is invariably saccharine. I have shown that the constant glycæmia depends on a normal function of the liver. About the same time I showed, by other experiments, that this physiological production of sugar in the liver is dependent on the influence of the nervous system, and that after injuring a particular spot in the fourth ventricle, not far from the origin of the pneumogastries, the saccharine matter is poured into the blood in such quantity as to render the animal diabetic. It was the ensemble of these facts that led me to admit the existence of a function of the hepatic organ, until then unknown, which I named the *glycogenic function of the liver*. . . . Next I found sugar in the allantoid and amniotic fluids, and in the urine, showing that diabetes is in some measure the normal condition in the fœtus. I obtained, moreover, especially from the muscles and the lungs, a substance that can produce sugar by a sort of special fermentation. I added, finally, some experiments on the influence of saccharine matter on the development of organic cells. From that time glycogenesis seemed to me to be, both in animals and in vegetables, a general physiological phenomenon, accompanying everywhere the manifestations of life. . . .

II. "But it was not sufficient to have ascertained the formation of sugar in the liver, it was necessary to penetrate deeper into the phenomenon, and to endeavor to make out its mechanism; this I called the second period of the question. It was marked by the *experiment of the washed liver*, and the discovery of the glycogenic matter, a discovery that in a manner changed the aspect of the problem by uniting it to one of the most difficult questions of General Physiology, that of the intimate nutrition of the tissues. . . . I have demonstrated that, in place of seeking the substance which precedes and produces the sugar immediately in the blood, it was necessary to locate it in the liver itself. . . .

"I finished by being convinced that the liver continued its glycogenic function after its removal from the body, and that after a certain time the quantity of sugar increased really and rapidly, after which time the quantity remained almost fixed. This was an unforeseen but most instructive fact. It demonstrates clearly the instability of the vital properties, and at the same time makes us appreciate the delicacy and all the difficulties of chemical analysis applied to the fluids and tissues of the organism. The same organic tissue, analyzed in exactly the same way, at intervals of five, ten, or fifteen minutes, is no longer the same tissue and does not give similar analyses. This applies not alone to the hepatic tissue—it is a general quality. All the animal fluids and tissues, within as well as without the organism, present a rapid and incessant chemical change.—*Gazette Hebdom.*, Jan. 21, 1876.

Thrombosis of the Cavernous Sinuses.—At the annual meeting of the Clinical Society of London, Dr. Dowse reported a case of a patient, robust and well built, who had received a blow on the occiput by being tripped up. He was slightly stunned, but able to walk home. No cerebral symptoms followed till the third day, when severe headache set in. The attacks of headache were varied by seizures of faintness and shivering, and he complained of the perversion of taste. The day before he came under Dr. Dowse's care, his vision became cloudy, and in a few hours was totally lost. The other special senses were good; cranial and spinal nerves normal; pupils dilated; the optic discs were swollen, and patches of retinal hemorrhage were discovered, the veins being large and tortuous. Death supervened upon an attack of erysipelas of the scalp, and the day before death, there were paraplegia and coma, but no convulsions or rigidity. No fracture of the skull was detected after death, but both cavernous sinuses were found completely occluded by fibrous clot. There was a recent hemorrhage into the right anterior cerebral lobe, which contained a clot, surrounded by punctiform hemorrhages. At the base of the brain there was a protrusion of cerebral substance, apparently due to the pressure of the clot. Dr. Dowse thought that thrombosis of the cerebral sinuses was more frequent than was supposed. Hemorrhage into the anterior lobe was rare. In the after-discussion, Mr. Hulke wished to know whether there was a pulsation of the orbital tissues, closely simulating aneurism, a symptom which was often described in cases of thrombosis of the cavernous sinus. He had himself seen it, and thought it explained by the diastole of the ophthalmic artery, being accompanied by

tension of the fluids in the tissues of the orbit. Mr. Holmes remarked that in many of these cases a loud murmur could be heard with the stethoscope. Dr. Dowse said that these signs were absent in his case. No stethoscopic examination of the head was made. Mr. Hulke, in reply to the President, Sir William Jenner, as to the nature and seat of the murmur, said that it was rhythmical with the pulse, and was attributed to compression of the carotid artery in the sinus, probably intensified by its conduction through the bones of the skull.—*The Lancet*, January 22, 1876.

Invasion of the Lymphatics of the Lung by Pleurisy.—At a meeting of the Pathological Society of London, Dr. Moxon presented a specimen of this kind, taken from a man, twenty-nine years of age, who was seen shortly before his fatal illness in good health. Three days later he was found in a sinking condition, half unconscious, with pulse 160, respiration 60, and hiccough, and died suddenly. At the post-mortem, ten hours after, the body was found already decomposing; the blood was of a dark color, staining the tissues, and the peculiar odor found in blood-poisoning was present. The only morbid condition discovered was that there were three ounces of sanguineous pus in the right pleura. Further examination showed the network of the lymphatics of the lungs to be filled with pus, which oozed from them on section, this condition extending as far as the bronchial glands. The lymphatics of the pleura were unaffected. At the posterior surface of the right bronchus there were two patches of coal-black color, and the bronchial glands behind this were much diseased. Two years ago two similar cases had been exhibited, in which intense pleurisy had invaded the lymphatics of the lung, and in both these cases there was obstruction of the bronchial glands. Dr. Moxon thought that in the case under observation the nutrition of the texture of the lung was probably impaired by the bad drainage, due to obstruction of the bronchial glands, and that it then was rendered liable to undergo more intense inflammation. As to the idea of blood-poisoning, he quoted the opinion of Dr. Wilkes, that in cases of inflammation of the pleura from blood-poisoning the process was always secondary to affection of the lung tissue.—*The Lancet*, January 22, 1876.

Method of Preparing Diseased Tissues for the Microscope.—Some time ago it occurred to Mr. John Stevenson that a mixture of glycerine and tragacanth might be used for the purpose of imbedding tissues, both recent and hardened. He takes two drachms of glycerine and mixes it on a slab with one drachm and a half of powdered gum tragacanth. The piece of organ to be sliced is placed in a two-dozen or smaller pill-box, and the mixture, lifted on a flexible knife, is poured into the box. It is allowed to stand in a cool place for from eight to twelve hours, when, if not wanted for cutting, the bottom is taken off the box and slit up the side, and a solid, somewhat elastic cake is obtained, with the piece of tissue imbedded in it. This is placed in methylated spirit until required. The tissue should be placed near the margin from which it is to be cut, and the cutting conducted in the usual way. It will be found best to moisten the surface by dipping it in spirit, and wetting the upper surface of the section knife with a camel's-hair pencil dipped in spirit, so that the section may float as it is cut. When it is to be kept in spirit for twelve to twenty-four hours, the mass is better mixed with two drachms of glycerine, one drachm of tragacanth powder, and fifteen grains of gum arabic powder. The properties of the mixture are quite in accordance with the chemical nature of its constituents, for glycerine dissolves gums and resins freely, being at the same time hygroscopic; and tragacanth has twenty-five times the power of ordinary gum arabic in communicating the property of viscosity to water. If the tissue has been previously in spirit, it must be steeped for a few hours in cold water before imbedding.—*Edinburgh Medical Journal*, January, 1876.

Observations on Revaccination during an Epidemic of Small-Pox.—Dr. William B. Davis, in a paper read before the Cincinnati Medical Society, comes to the following conclusions, from observations in that city during an epidemic of small-pox: *First*, That exposure to infection and intense epidemic influence largely increase the susceptibility of the system to the influence of vaccine virus, and accounts for the unusual number of successful revaccinations during the existence of an epidemic. *Second*, That variola and varioloid give no more protection from a recurrence of variola than vaccination. *Third*, The cicatrix is not a safe criterion of the degree of protection given by the vaccination from which it resulted. *Fourth*, It is advisable to revaccinate upon every exposure to infection, unless it has been done recently with success. *Fifth*, Those who were successfully revaccinated were, to some extent, susceptible to the variolous influence; not that all would have taken the infection, for an epidemic never takes all the unprotected. That they are in some danger is proven by the results of vaccinations in the hospitals and standing armies of Europe. In the Prussian army the annual death-rates from small-pox, before revaccination was introduced, averaged 104. During the twenty years immediately succeeding the establishment of systematic revaccination, there were but forty fatal cases, and Simon says, but four of these had been successful revaccinations.

The Causes and Treatment of Sleeplessness.—Dr. J. Milner Fothergill thinks the experiments of Durham, Hammond, Donders, and others, have clearly shown the relation of sleep to cerebral anæmia. This condition of anæmia is produced by the co-operation of two factors, one a modification of the vascular system, the other a diminution of activity in the cerebral cells themselves. It is the combination of these two factors in the production of sleep that must ever be borne in mind in the treatment of each case of insomnia. Sleeplessness, among other causes, is due to a condition of high cerebral vascularity. There may be a local (cerebral) hyperæmia, a general vascular excitement, and a rise of temperature. Opium alone will not meet these complex states. In order to procure its hypnotic effects, it is necessary to combine it with a direct vascular depressant. In chloral-hydrate we have a drug which acts upon the nervous system, lessens the heart's action, and lowers the temperature. But the very qualities which may here render it so valuable, constitute the objections to its use in other forms of insomnia. A different form of sleeplessness is found where patients have cerebral anæmia. Here there is sleepiness felt during the day, especially when in the upright position, but at night when the body is recumbent a state of wakefulness is instituted. Such a condition is most pronounced in melancholics. Bromide of potassium and chloral in such cases, however effective in procuring sleep, are injurious, from their tendency to aggravate the condition of anæmia. Authorities advocate, instead, alcohol and opium, accompanied by a generous diet, and by the exhibition of iron and quinine in fair quantities. There is a form of passive cerebral hyperæmia, in which insomnia is present, due to partial vaso-motor paralysis of the in-

tracranial blood-vessels, usually associated with mental overwork. One constituent factor of the treatment must be to lessen this cerebral activity by some suitable agent. Bromide of potassium, of all remedies, is the most efficient, and with it digitalis may be advantageously combined. In such cases it is the action of digitalis upon the peripheral vessels, rather than its effect upon the heart which renders it so valuable here. Dr. Fothergill, after reviewing the different forms of sleeplessness, mentions some of the chief forms of hypnotics in common use. Opium is indicated in conditions of insomnia, which originate in pain. Hyoscyamus may be resorted to in cases where opium or morphia disagree, as in chronic renal disease. Hydrate of chloral is useful in conditions of vascular excitement, either alone or in combination with opium. In cases of sleeplessness, where there is continuous high blood-pressure, or where there is distinct pyrexia, chloral-hydrate is the hypnotic *par excellence*. It is to be avoided, however, where inability to sleep is due to worry and to brain exhaustion. The utility of bromide of potassium is shown where cerebral activity is kept up by distant peripheral irritation, especially where that irritation lies in the pelvic viscera.—*The Practitioner*, February, 1876.

On Benign Polypoid Excrescences of the Bladder in the Male.—Dr. Hermann Maas, of Breslau, has recently met with three cases of mucous polypi of the male bladder, which are interesting from their rarity and from the means adopted to diagnosticate and cure them. The first occurred in a previously healthy man of fifty-three, and his only complaint was of the occasional passage of blood with his urine, particularly after taking spirituous drinks. Of late, however, the blood had come so frequently and in such large quantities as to weaken him very seriously. Careful examination revealed nothing to account for the hemorrhage. Suspecting that possibly there was a small ulceration, Dr. M. introduced a large double-current catheter into the bladder, and poured in weakly carbolized water. All of a sudden the outward flow of water was arrested, and on withdrawing the catheter, which required some little effort, a mucous polypus, pedunculated, and of the size and shape of a small hazel nut, was found engaged in its eye. On a second attempt Dr. M. was fortunate enough to secure a second polypus in the same way, and after its removal there was no return of the hemorrhage. The second case was in an officer of thirty-three, who had suffered for some years from a stricture of the membranous urethra, which had been very irregularly treated. His history was that at times he had had attacks of complete retention of urine, which had been relieved by the passage of smaller bougies and had been called "spasmodic." Dr. M., when he first saw him, could pass a No. 5 Charrière, and soon was able to increase it to No. 9. All of a sudden the urine was arrested, and could not be made to flow until a catheter of corresponding size had been several times passed well into the bladder. Being unable to diagnosticate a stone, and remembering the last case, the doctor endeavored to entrap the polypus he suspected by similar means. As the circumstances of this case forbade the use of the double catheter, he introduced a No. 8 elastic English catheter, after enlarging its eye. This was connected by rubber tubing with a ⊥ shaped glass tube, and by means of a funnel the bladder was fully distended with warm carbolized water. Depressing, then, the outer end of the tube, gravity, aided by the expulsive force of the bladder, caused a rapid flow of water, and after several trials the suspected polypus was engaged and removed. It was 17 mm. long and 7 thick. There was no further retention. The third case was almost precisely similar to the second, the polypus being the size of a strawberry.—*Berl. Klin. Woch.*, Jan. 24, 1876.

Alkaptonuria.—The following observations on a case where alkapton was found in the urine are reported by Dr. Fürbringer, from the Clinique of Prof. Friedreich. The patient was a consumptive in an advanced stage of the disease, and the urine, which was scanty, of a dark color, acid reaction, and of normal specific gravity when treated with Trommer's test, showed a precipitate of the red and yellow oxides of copper, though no sugar was present. The dark color, which was due to the presence of an unusual amount of urophæin, was ascribed to co-existing chronic disease of the liver. Proof of the existence of alkapton, which was suspected, was found in the absorption of oxygen when the diluted urine was agitated with caustic potash. The absence of sugar was determined by first precipitating with an abundance of acetate of lead, and then testing the filtrate by Trommer's method, for the alkapton is carried down with the precipitate. This then will be found the best method of eliminating alkapton from any suspected fluid, and afterwards determining the presence or absence of sugar. Thus tested, there was not the slightest trace of reduction of the copper salt. Various other tests corroborative of the absence of sugar, and the presence of alkapton were employed, notably Böttger's, depending on the reduction of a bismuth salt, the fermentation test, Mulder's indigo test, and the silver and quicksilver test. A number of others are also referred to of interest to the chemist. Several were also rendered ineffectual by the large amount of coloring matter contained in the urine. The post-mortem examination was made by Dr. Thoma, and nothing of special significance was found. No anomaly was discovered in the urinary passages, nor was alkapton found in any other fluids of the body. Hence Dr. F. concludes that alkapton is first formed in the secreted urine within the organism. Boedeker's case is the only other one which the author can find reported, and in the absence of a larger number for comparison, the presence of alkapton in the urine remains wholly unexplained.—*Berl. klin. Woch.*, June 7 and 14, 1875.

A Case of Splenic Fever.—The following case is reported by Prof. Bollinger, of Munich. A cow was sick, and although, when she was killed, the intestines were found full of blood, and the spleen four times its natural size, still the flesh was eaten by men. A few days later the butcher observed a small red spot on the ball of his right thumb, which soon acquired a red areola and a dark-blue vesiculation. At the end of four days, when general symptoms with great depression had appeared, the sore was cauterized with the hot iron. Nevertheless, the man died on the eighth day, after having convulsions, trismus, high fever, etc., At the autopsy the characteristic features of a splenic fever carbuncle were found in the arm, viz., dark coloration with red areola and distinct vesicles, together with oedematous swelling of the the lymphatic glands. There was also hemorrhagic effusion into the stomach. Many bacteria were found in the spleen, but few in the carbuncle or in the blood. Inoculations of the blood upon sheep caused their death in from two to five days, with pronounced symptoms of apoplectiform anthrax; nor did the addition of salicylic acid serve to disinfect the poisonous blood. *Aerztlich. Int. Bl. No.* 4, 1876.—*Allg. Med. Cent. Zeit.*, Feb. 2, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, March 25, 1876.

THE PROGRAMME OF THE INTERNATIONAL MEDICAL CONGRESS.

THE Centennial Medical Commission has, through its Committee of Arrangements, so far perfected its plan of the work to be accomplished during the week ending September 9th at Philadelphia, as to be able to publish its preliminary programme. We can well appreciate the amount of thought and labor expended in making the various features of the entertainment blend and harmonize into one uniformly attractive whole. We infer from the employment of the qualifying term "preliminary," that the programme is as complete as it is now possible to make it; but that it may still admit of extension by additions, possibly from foreign sources. Indeed, it must be very difficult at the outset to impress upon gentlemen from abroad the urgency of these early preparations for a great undertaking, and the necessity of immediate responses to the solicitations of a Secretary or a Committee. A Congress to meet six months from this date should be more than a mere outline to-day. Happily, this Congress has long since advanced beyond the shadows of coming events, and has already passed into a structure of a very substantial character, indicating clearly the scope of its practical work and its various projected paths of usefulness.

The almost total absence of foreign names strikes one at a glance, that of Prof. Lebert of Breslau University being the only one upon the list. This is no fault of the Committee, however; for we learn that other gentlemen have been invited to address the Congress and have declined. It was part of the original plan of the Commission, that four addresses should be delivered by distinguished foreigners, before the Congress in its entirety, at the morning session. It is of course impossible to carry this feature into execution, if gentlemen who may be selected are unable to accept; but there is plenty of opportunity offered for good volunteer papers from medical men the world over. These may be even more provocative of discussion than those already included in the programme of work of the sections, of which there are nine. While it is absolutely essential to the success of such a Congress that the labor should be systematically prepared beforehand, a great deal of the interest attached to the sectional discussions in the American Medical Association has resulted from their spontaneousness. Much more sparkle is associated with such voluntary efforts, and a greater amount of agreeable effervescence constantly bubbles up to the surface under their influence.

The programme of addresses before the general Congress embraces an excellent selection of representative men, judiciously apportioned from various localities. There is no very good reason, however, why Philadelphia should have so thoroughly ignored her own just claims to a prominent place upon the list. She was certainly entitled to one representative man in this portion of the programme. It would be an act of injustice to her, and to her excellent corps of able and active thinkers and workers—many of whom have adorned the paths of professional labor, and of medical literature—if the inference should be drawn by foreign visitors or readers, or even by our fellow-countrymen, that any lack of originality, or of ability was the cause of such exclusion. Our friends in that city who have arranged the programme of the congress have only themselves to blame if their modesty has been carried to the extent of self-immolation. Even in the work of the sections we find the names of but four Philadelphians out of the thirty-five who are to open the discussions on scientific subjects. New York, in addition to her representation in the list of morning addresses, supplies the names of fourteen reporters for the section. Their names will be found in another column. Only four subjects will be discussed in each section, one being allotted to each afternoon. There will then be abundant opportunities for the presentation of voluntary papers; the fifth day, it is presumable, being also devoted entirely to them. Hundreds of distinguished men in all portions of the world will be invited to attend the sessions of the Congress. It is to be hoped that the responses will be of such a nature as to make this meeting a memorable one by the presence of numerous representatives of science, learning, and skill from foreign countries as well as from our sister states of the Union.

"SHALL IT BE A PROFESSION OR A TRADE?"

IT will not be forgotten that, on more than one occasion, we have impressed upon our pharmaceutical friends the importance of regarding themselves as members of a worthy profession, which should be elevated beyond and above the baser considerations and temptations of trade. We shall be gratified if, as a result of the

proper digestion of this food for reflection which we have given them, pharmacy shall attain the elevated rank it deserves to occupy. We are fortified in the correctness of our views, when we find them endorsed by one of the oldest colleges of pharmacy in the country—that at Philadelphia. In his valedictory to the graduating class of that school, delivered March 14, 1876, Prof. Joseph P. Remington employed the following language, which is almost identical with that of the RECORD (in its editorial, Oct. 9, 1875, "Shall it be a Profession or a Trade?") in its allusion to the same topic: "A very important subject must soon be solved. Do you regard your avocation as a profession or a mere business calling? * * * You must make a decision. What shall it be? Profession or trade, pharmacy or a black art, pharmacopœia or price current?" These queries, coming from such an authoritative source as the rostrum of the College, were doubtless well received. They are our own, and we therefore return the compliment, and ourselves endorse them.

THE EAGLEY EPIDEMIC.

THE account of the Epidemic at Eagley, which we are enabled to give in another column, is a suggestive comment upon the dangers to which every one who uses milk may become exposed. If the present example were an isolated one, we might offset the apparent sensationalism connected with it. It is true, instances of the sort are not common, but this should not deter us from appreciating them when they do occur, and guarding as much as possible against their recurrence. How this latter can be accomplished is a problem which is engaging the attention of the legislators of Great Britain; and it is now quite possible that some means will be adopted by the English Government to prevent a repetition of such wholesale poisoning. Probably the only thing that can be done in this direction is a periodic inspection of all dairy farms. Doubtless in this country any enactments having such an end in view, would be looked upon as an unnecessary refinement in sanitary science; but its reasonableness can hardly be denied by any one who is willing to admit the possibility in any dairy district of a similar set of causes as those operating at Eagley producing similar results. Until we look into the whole matter of our milk supply, it is impossible to conjecture how many cases of fever, diarrhœa, and various anomalous and apparently inexplicable symptoms, may not be traced to the admixture, accidental or designed, of putrid material in the water used. At this time, when such a general interest is manifested in the subject, it may be a matter of curiosity, if not of profit, for some of our readers residing in the rural districts, to study the causation of some of the fevers and diarrhœas which they may be called upon to treat in connection with the water supply of the barn yard and the dairy.

THE CARE OF THE INSANE.

DR. H. B. WILBUR, the accomplished Superintendent of the Syracuse Idiot Asylum, has just submitted a report to the State Board of Charities founded upon personal observations concerning the management and construction of the insane asylums of Great Britain, in which is embodied some interesting conclusions bearing upon the care of the insane in our own country. From an economic point of view the cost of the construction of our asylums does not bear a very flattering comparison. Dr. Wilbur found that the Commissioners of Lunacy gave the maximum cost of construction as £150, or about $750. per patient, including land and furniture. In Massachusetts, on the other hand, the cost of two asylums in the course of construction is estimated at the enormous sum of from $2,500 to $3,000 per capita; while one in New Jersey, also being built, is fully up to the last high figure, and the three asylums in process of erection in this State will range from $4,000 to $5,000 per patient. Regarding the cost of maintenance of each patient after his or her reception, there appears to be a similar difference, in this State at least, in favor of the economy of management in the British asylums. For instance, in the three State Lunatic Asylums in this State the average weekly cost of maintenance exceeds six dollars for each patient. In one of these institutions, during 1874, it even exceeded that amount. On the other hand, the average cost per patient in the county asylums in England, institutions corresponding to our State Asylums, is less than three dollars, including clothing; and in like asylums in Scotland and Ireland considerably less. These are very important facts for the consideration of every one interested in the economical and yet proper care of our insane.

From this point of view, at least, we have something to learn from our transatlantic cousins. On a previous occasion we alluded to the beneficial effects of engaging the patients in some sort of employment; and we again take the opportunity of referring to the matter, by way of showing the actual per cent. of those who can be placed under such influences. In this country the employment system has gone so much out of fashion that we are almost without statistics for comparison. The Utica Asylum, however, furnishes a starting point by showing that the average of male labor was less than eighteen per cent. of the entire number of male inmates. Dr. Wilbur found in the English asylums which he visited that the employed patients averaged fully sixty-two to sixty-eight per cent., while the percentage in Scotland was even greater. This gives us a very marked difference in figures; and, taken in account with the statement that the patients "are a better-looking set physically than the patients in some American asylums," is, to say the least, quite suggestive. In this connection we may quote the following statement as having a significant bearing in this connection:

"Within a few years, in a certain Scotch asylum where the employment of patients had been pushed to its maximum, the sagacious and kind-hearted Superintendent thought that he would try the experiment of unlocking the doors of one of his best wards and patrolling the patients. This worked well; he tried the next, and so on till a large degree of personal liberty was enjoyed by nearly all the patients. Though the Superintendent, Dr. Batty Tuke, has retired from this asylum, his successor, Dr. Fraser, has administered its affairs in the same benevolent spirit."

We will also remind our readers, in passing, of more unequivocal testimony as to the benefits of the employment system, which is embodied in the extract from a letter of Dr. Wilbur, to which reference was made in our recent comments upon the paper of Dr. Nathan Allen on *State Medicine in its relations to Insanity* (*vide* vol. x., page 41).

In regard to extravagance in the construction of our asylums, Dr. Wilbur very truly says:

"There is in Great Britain a safeguard against squandering money on buildings that, most unfortunately, does not apply in the construction of State Asylums in America. It is this: the tax to meet such outlay is drawn from the same locality where it is expended, and the members of the boards of management are among the largest tax-payers of the region. Thus, their own pecuniary interests, and a sense of responsibility to an immediate constituency, equally interested together, act as a strong check against extravagance."

We have, however, said enough to give the general drift of the report, and will close by quoting the conclusions of Dr. Wilbur:

"That in this country the welfare and comfort of the insane, and the various correlated interests of society, would meet on common ground, not until every State in the Union had some legally constituted board, alike in powers and functions to those of the British Boards of Lunacy."

There are many other very interesting matters referred to in the report which we shall take occasion to notice at some future time.

OVERCROWDED SCHOOLS.

We are pleased to learn that the Committee on By-Laws of the Board of Education have given the subject of overcrowding in the public schools such a consideration as its importance demands. They very frankly admit that the evil of which so much complaint has been made exists to an alarming extent, and show a very commendable spirit to remedy it as far as it may lay in the power of the Board. They make a provision for increased capacity for each scholar, which, although it is still inadequate, is still a great improvement of the former condition of things. The following sensible regulation was recommended and adopted:

"It shall be the duty of every principal to reject all applications for the admission of pupils into any school or class, whenever the room occupied by the same is filled to the extent of its sitting capacity."

PROPOSED AMENDMENTS TO THE PHARMACY BILL.

In the year 1872 the Legislature of this State enacted a law to regulate the practice of Pharmacy and the sale of poisons in the city and county of New York. It is within the recollection of many of our present readers that this law was the result of a determination on the part of the pharmacists in this city, represented by the College of Pharmacy, not only to supersede the one at that time in force but to improve the status of pharmacy in general by the establishment of a system of registration which should ensure qualification and responsibility on the part of every one who dispensed medicines. Through the energy of Senator Weismann and the hearty co-operation of Assemblyman Loughran the desired result was obtained, and since that time the working of the law has been in the main satisfactory. One of its provisions was to the effect that the members of the college should elect five competent pharmacists, three of whom should be also graduates in medicine, and two graduates of the college, who should constitute a board for the examination and registration of all those not already graduates and not already licensed, who desired to conduct the business of pharmacists. Experience has now proved that the difficulty of constituting the board in accordance with the letter of the law is so great that an amendment has been offered to remedy it. The latter consists in a recommendation that the said board shall be composed entirely of graduates in pharmacy, the reason for this being that it is exceedingly difficult to find a sufficient number of physicians who, being competent for the appointment, are willing to act.

Another amendment consists in a provision that, from the first of July, 1878, only graduates in pharmacy from an American or foreign College of Pharmacy shall be allowed to establish themselves in the city and county of New York; and that after 1878 the board shall restrict itself to the examination of candidates for a licentiate's degree.

It is also proposed that the clause in the present law that junior assistants or apprentices shall not be permitted to prepare physicians' prescriptions until they have become graduates or licentiates, be so amended as to give all such persons opportunity to dispense prescriptions under the supervision and upon the responsibility of their principals. A bill embodying these provisions, presented to the State Senate by Senator Booth, has already passed that body, and will soon come before the Assembly for its action. The changes proposed in the present law have received the sanction of all the leading pharmacists of this city, and there is every reason to suppose that the Assembly will follow the lead of the Senate.

If this be the case, we shall doubtless have a law for the regulation of pharmacy in this city and vicinity which shall be as near perfection as ordinary legislation can make it. The profession are certainly enough interested in the result to throw the weight of its influence in the scale.

Correspondence.

THE ELECTROLYTIC TREATMENT OF MALIGNANT TUMORS.

To the Editor of The Medical Record.

Sir:—I am not in the habit of entering a journalistic controversy, especially when the assailing person, the critic, is unwilling to sign his name. In the first place, such polemics never promote scientific knowledge; and besides, very few readers take the trouble to examine the facts, thus leaving much room for incorrect statements and vague insinuations.

My critic, C. E. H., in the last number of the Record, intentionally tries to confuse the readers by mixing up different articles written by me on different subjects, at different times, and in different places, reviewing them as "*a part of the same work*," adding in parenthesis, very adroitly, for any future emergency, that he supposes so. The critic acknowledges, however, that he owns my "*Galvano-Therapeutics*," and therefore he ought to know that it contains only articles on the auditory, sympathetic, and pneumogastric nerves. At the time of their publication, they supplied a want in the American medical literature; and, besides containing original researches, gave a complete, though concise exposition of our knowledge on these subjects.

The critic quotes a few phrases from my researches in *Virchow's Archives*, where on the first page I say, that I published, some years ago, a short preliminary notice on the electrolytic treatment of malignant tumors, that gave rise to misunderstandings; but he does not explain that the very article from which he quotes is the one containing a full and minute exposition of my views and methods. He thus leaves the reader under the wrong impression, that I had not fulfilled my promise.

If the critic has really read my researches in Virchow's Archives, he ought to be the last to complain that "*I do not go into minutiæ, &c.*," as I have given a most detailed account of my cases, and an exhaustive exposition of my views and my methods of treatment. He refers to the case of Mrs. H., which I mentioned merely as a corollary to the preceding case described on five pages, and to the following one described on four pages. His quotation as regards the treatment is of no practical use without a general knowledge of the whole theory. But even in these few lines, the critic misquotes me, and is incorrect.

The last fault the critic finds with me, is that I published my researches *in extenso* in German, while I gave only a short resume for American physicians. But this has certainly been against my will.

I herewith, Mr. Editor, send you for inspection the English manuscript of my researches on the electrolytic treatment of malignant tumors, a monograph containing more than one hundred and thirty pages, certainly too voluminous to be published in a medical weekly.

An American journal refused to publish these researches; and I have asked in vain for an opportunity to read my paper before the Academy of Medicine, but the late president denied me this opportunity, on the ground, as he wrote me at the end of two years, that the subject did not present sufficient interest, and added, to enable me "to accumulate more interesting facts."

Truly the old French adage can still justly be applied to those learned critics who scarcely ever make original researches: "la critique est aisée, mais l'art est difficile." Yours very truly

Wm. B. Neftel.

DEATH FROM RUPTURE OF AN ANEURISM—SUPPOSED CAUSE, PENETRATING WOUND OF THE HEART.

To the Editor of The Medical Record.

The first officer of a merchant ship, during an altercation with one of his men, received a stab in the chest with a sheath-knife and fell back dead.

Being summoned to the case, we found the man, as had been reported, laying on the ship's hatch lifeless.

On baring the chest there was disclosed a wound an inch long on the left third intercostal space, directly over the heart.

Having no other idea than that the instrument had penetrated the organ, and was the immediate cause of death, we reported the case to the coroner.

On making a post-mortem we found that the knife had barely passed into the cavity of the chest, and was consequently not the cause of death, as had been supposed.

A further examination, however, disclosed a ruptured aneurism of the pulmonary artery, the immediate cause of which was doubtlessly the excitement of the scuffle and the shock of the blow from the knife.

The two points of special interest in connection with this case are:—

1st. The location of the aneurism. As Flint, in his chapter on thoracic aneurisms, does not mention a single case as occurring in the pulmonary artery, we concluded it must be rare.

2d. The medico-legal question which might arise, as to the degree of criminality of the assailant. It is clear that, had there been no post-mortem, the case would have been declared one of murder in the first degree.

The revelations of the autopsy, however, converted it into a simple assault with a deadly weapon; at least such was the wording of the indictment, which was carried out by the decision of the court, as the prisoner received some six or eight months only.

D. B. Simmons,
Chief Surgeon to Ken Hospital, Yokohama, Japan.

Yokohama, Japan, *January*, 1876.

College of Pharmacy of City of New York.—The Forty-Sixth Annual Commencement was held on Tuesday evening, March 21st, 1876, at Chickering Hall. After the opening address by the President, Paul Balluff, the degree of "Graduate in Pharmacy," was conferred upon thirty-nine gentlemen. Prof. P. W. Bedford awarded the alumni prizes: the first, a gold medal, to Henry C. Schrank; the second and third of equal value, and for equal grades, to Adolph Henning and Henry Millar. Prof. Edward Curtis, M.D., delivered the address to the graduates, after which the valedictory was pronounced by H. Lieber Coit, of the Graduating Class.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from February 12th to February 18th, 1876.

MILHAU, J. J., Surgeon.—Leave of absence extended four months. S. O. 49, A. G. O., March 13, 1876.

FORWOOD, W. H., Asst. Surgeon.—Granted leave of absence for one month, with permission to leave limits of the Department. S. O. 43, Department of Texas, March 11, 1876.

ADAIR, G. W., Asst. Surgeon.—Assigned to temporary duty as Post Surgeon at Fort Richardson, Texas. S. O. 43, C. S., Department of Texas.

MAUS, L. M., Asst. Surgeon.—When relieved at Nashville, Tennessee, by Asst. Surgeon Greenleaf, assigned to duty as Post Surgeon at Chattanooga, Tenn. S. O. 39, Department of the South, March 16, 1876.

Medical Items and News.

INTERNATIONAL MEDICAL CONGRESS, Philadelphia. Preliminary Programme.—The Congress will meet at noon, on Monday, September 4th, 1876, in the University of Pennsylvania. The following addresses will be delivered in general meeting:—On Medicine, by Prof. Austin Flint, M.D., New York. On Hygiene and Preventive Medicine, by Henry I. Bowditch, M.D., of Massachusetts. On Surgery, by Prof. Paul F. Eve, M.D., of Nashville. On Obstetrics, by Prof. Theophilus Parvin, M.D., of Indiana. On Medical Chemistry and Toxicology, by Prof. Theodore G. Wormley, M.D., of Columbus, Ohio. On Medical Biography, by J. M. Toner, M.D., of Washington, D. C. Address, by Prof. Hermann Lebert, of the University of Breslau. On Medical Education and Medical Institutions, by Prof. Nathan S. Davis, M.D., of Chicago. On Medical Literature by Prof. L. P. Yandell, M.D., of Louisville. On Mental Hygiene, by John P. Gray, M.D., of Utica, N. Y. On Medical Jurisprudence, by Prof. S. E. Chaillé, M.D., New Orleans. Discussions on Scientific Subjects will be opened in the sections as follows:—

SECTION I. MEDICINE.—Typho-malarial Fever; is it a special Type of Fever? J. J. Woodward, M.D., Assistant-Surgeon, U.S.A. Are Diphtheretic and Pseudo-membranous Croup Identical or Distinct Affections? J. Lewis Smith, M.D., of New York. Do the Conditions of Modern Life favor specially the Development of Nervous Diseases? Prof. Roberts Bartholow, M.D., Medical College of Ohio. The Influence of High Altitudes on the Progress of Phthisis. Charles Denison, M.D., of Denver, Colorado.

SECTION II. BIOLOGY.—Microscopy of the Blood. Prof. Christopher Johnston, M.D., of Baltimore. The Excretory Function of the Liver. Prof. Austin Flint, Jr., M.D., of New York. Pathological Histology of Cancer. Prof. J. W. S. Arnold, M.D., of New York. The Mechanism of Joints. Prof. Harrison Allen, M.D., of Philadelphia.

SECTION III. SURGERY.—Antiseptic Surgery. Prof. John T. Hodgen, M.D., of St. Louis. Medical and Surgical Treatment of Aneurism. Prof. William H. Van Buren, M.D., of New York. Treatment of Coxalgia. Prof. Lewis A. Sayre, M.D., of New York. The Causes and Geographical Distribution of Calculous Diseases. Claudius H. Mastin, M.D., of Mobile, Ala.

SECTION IV. DERMATOLOGY AND SYPHILOLOGY.—Variations in Type and in Prevalence of Diseases of the Skin in Different Countries of Equal Civilization. Prof. James C. White, M.D., of Boston. Are Eczema and Psoriasis Local Diseases, or are they Manifestations of Constitutional Disorders? Lucius Duncan Bulkley, M.D., of New York. The Virus of Venereal Sores; its Unity or Duality. Prof. Freeman J. Bumstead, M.D., of New York. The Treatment of Syphilis, with Special Reference to the Constitutional Remedies appropriate to its various Stages; the Duration of their Use, and the Question of their Continuous or Intermittent Employment. Prof. E. L. Keyes, M.D., of New York.

SECTION V. OBSTETRICS.—The Causes and the Treatment of Non-puerperal Hemorrhages of the Womb. Prof. William H. Byford, M.D., of Chicago. The Mechanism of Natural and of Artificial Labor in Narrow Pelves. Prof. William Goodell, M.D., of Philadelphia. The Treatment of Fibroid Tumors of the Uterus. Washington L. Atlee, M. D., of Philadelphia. The Nature, Causes, and Prevention of Puerperal Fever. Prof. William T. Lusk, M. D., of New York.

SECTION VI. OPHTHALMOLOGY.—The Comparative Value of Caustics and Astringents in the Treatment of Diseases of the Conjunctiva, and the Best Mode of Applying them. Prof. Henry W. Williams, M. D., of Boston. Tumors of the Optic Nerve. Hermann Knapp, M. D., of New York. Orbital Aneurismal Disease and Pulsating Exophthalmia; their Diagnosis and Treatment. Prof. E. Williams, M.D., of Cincinnati. Are Progressive Myopia and Posterior Staphyloma due to Hereditary Predisposition; or can they be induced by Defects of Refraction, acting through the Influence of the Ciliary Muscle? E. G. Loring, M. D., of New York.

SECTION VII. OTOLOGY.—Importance of Treatment of Aural Diseases in their early Stages, especially when arising from the Exanthemata. Albert H. Buck, M.D., of New York. What is the Best Mode of Uniform Measurement of Hearing? Clarence J. Blake, M.D., of Boston. In what Percentage of Cases do Artificial Drum-membranes prove of Practical Advantage? H. N. Spencer, M.D., of St. Louis.

SECTION VIII. SANITARY SCIENCE.—Disposal and Utilization of Sewage and Refuse. John H. Rauch, M.D., of Chicago. Hospital Construction and Ventilation. Prof. Stephen Smith, M.D., of New York. The General Subject of Quarantine, with Particular Reference to Cholera and Yellow Fever. J. M. Woodworth, M.D., Supervising Surgeon-General U. S. Marine Hospital Service. The Present Condition of the Evidence concerning "Disease germs." Thomas E. Satterthwaite, M.D., of New York.

SECTION IX. MENTAL DISEASES.—The Microscopical Study of the Brain. Walter H. Kempster, M.D., of Oshkosh, Wisconsin. Responsibility of the Insane for Criminal Acts. Isaac Ray, M.D., of Philadelphia. Simulation of Insanity by the Insane. C. H. Hughes, M.D., of St. Louis. The Best Provision for the Chronic Insane. C. H. Nichols, M.D., of Washington, D. C.

Gentlemen intending to make communications upon scientific subjects, or to participate in any of the debates, will please notify the Commission before the first of August, in order that places may be assigned them on the programme.

In order to facilitate debate, there will be published

on or about June 1st the outlines of the opening remarks by the several reporters. Copies may be obtained on application to the Corresponding Secretaries.

The volume of Transactions will be published as soon as practicable after the adjournment of the Congress.

The public dinner of the Congress will be given on Thursday, September 7th, at 6.30 P. M.

The registration-book will be open daily from Thursday, Aug. 31, from 12 to 3 P. M., in the Hall of the College of Physicians, N. E. corner 13th and Locust Streets. Credentials must in every case be presented.

The registration fee (which will not be required from foreign members) has been fixed at Ten Dollars, and will entitle the member to a copy of the Transactions of the Congress.

Gentlemen attending the Congress can have their correspondence directed to the care of the College of Physicians of Philadelphia, N. E. corner of Locust and Thirteenth Sts., Philadelphia, Pennsylvania.

There is every reason to believe that there will be ample hotel accommodation, at reasonable rates, for all strangers visiting Philadelphia in 1876. Further information may be obtained by addressing the Corresponding Secretaries.

All communications must be addressed to the appropriate Secretaries at Philadelphia.

S. D. Gross, M. D.,
President.

William B. Atkinson, M.D., 1400 Pine Street, *Recording Secretary.* William Goodell, M.D., 20th and Hamilton Sts., Daniel G. Brinton, M.D., 115 S. 7th Street, *American Corresponding Secretaries.* Richard J. Dunglison, M.D., 814 N. 16th Street, R. M. Bertolet, M.D., 113 S. Broad Street, *Foreign Corresponding Secretaries.*

Philadelphia, March, 1876.

The "Milk Epidemic" at Eagley, to which we have made reference two weeks since, is still causing a great deal of sensation in England and awakening a considerable amount of interest in medical circles in regard to its origin. As the result of a thorough investigation on the part of the health authorities, it seems that the fever—a mild form of typhoid—was clearly traceable to milk contaminated with water which was "so foully polluted as to render it little better than liquid sewage." It seems from more detailed reports which comes to us from across the water, that the earliest case was brought before the notice of the local authorities on Wednesday, the 9th of February, and that before the following Saturday evening there were between eighty and ninety persons confined to their beds with fever, eleven of whom eventually died of it. The suddenness and violence of the attack and its limitation to a small locality naturally suggested some local cause, and investigations were at once instituted to discover it. Eagley does not contain more than five hundred inhabitants, and the majority of these are employed in some tape and cotton thread works which are built on the stream running through the valley and passing by the lower part of the hamlet. It was soon discovered that in every case of sickness during the epidemic, the sufferers had been accustomed to drink milk from one particular farm, while those who had not been in the habit of drinking that milk, although living in the same house, invariably escaped the disease. A visit was next made to the farm, which showed that the milk cans were always washed with water from a brook which ran by a mill in course of construction, and that the workmen employed in the latter work had, for want of better conveniences, deposited their excrement upon the banks, whence the said excrement was washed into the stream by every fall of rain. The milk had been in this manner evidently contaminated with sewage matter. An examination of the water in the tubs left little doubt as to its sewage contamination, as it contained large quantities of free ammonia, albumenoid ammonia and chlorine.

The *Medical Press* and Circular (Mar. 1), in a leading article upon the subject from which we have condensed the above facts, says:—

"But as far as the etiology of typhoid fever is concerned, the great question is, whether this sewage-contamination was or was not of a specific nature. In most outbreaks of this kind, the water has been found to have been polluted with fever evacuations, and a more strict investigation will be necessary before it can be said that such was not the case in the Eagley epidemics. At all events, this and similar outbreaks show the necessity of ensuring the purity of all water that is used in dairy farms, and in the premises of all milk-venders."

Uniformity of Weights and Measures.—Dr. E. Seguin of this city, who has within the past three or four years given a great deal of attention to the development of an idea to establish a unity of method in scientific observation throughout the world, proposes through the next International Medical Congress to infuse a more practical interest into the subject among medical men throughout the world. After referring to what has already been done in advocating the claims of such a uniformity of system, he says:—

"In furtherance of these antecedents, it is now proposed to submit the same question to the next International Medical Congress—to ask the Congress to constitute National Commissions, similar to the French one, which has volunteered its services in Paris; to appoint the next meeting of the International Medical Association, as the place where these Commissions will present a joint report on the most practical means of *uniformising* the methods, instruments, and records of observation; to consider the feasibility of this plan in connection to—but not by confounding it with—the adoption of the French Metric System; to entrust all the executive measures demanded for the realization of this plan to Dr. W. B. Atkinson, the General Secretary of both the American and the International Associations."

Slaughtering-Houses.—The Health Commissioners, as the result of a recent tour of inspection of the different slaughtering-houses of this city, suggest that on the east side the butchers erect a capacious building near the water's edge, provided with all the modern improvements to preserve cleanliness and prevent waste of blood and the other matter now carried off by the sewers. This waste material can be made into fertilizers worth $40 a ton. They maintain that no matter how much pains the butchers may take, they cannot profitably conduct a small slaughter-house in such a manner that it would not prove detrimental to the health of those living in the neighborhood. On the west side the butchers could hire "baulks" in the abattoir at the foot of Thirty-fourth street, or unite and build such a building as is suggested for the east side. They are, therefore, convinced that the best interests of the city demand the removal of slaughter-houses beyond the more thickly inhabited quarters, and they will call for the enforcement of the ordinance that limits their remaining below One-hundred-and-tenth street to July 4, 1876.

Medical Relief Tickets.—The New York Orthopædic Dispensary and Hospital issue recommendations in blank for physicians who may desire to send any of their poor patients for treatment. A surgical clinic is held every Wednesday at 2 P. M., and an orthopædic clinic every Friday at 2 P. M.

The Italian Medical Association is to be held in Turin, commencing September 18th, 1876.

Religious Insanity.—Dr. Gray, of the Utica Insane Asylum, declared, some time ago, that he had yet to see a case of insanity which could be clearly traced to religious excitement as its cause. Rather a remarkable statement; but it must be recollected that his patients coming, as they do, from New York, are not very susceptible to such exciting causes.

Centennial Exhibition.—Dr. William Pepper, of Philadelphia, has been chosen medical director of the Exhibition.

Medical Colleges of Philadelphia.—The Jefferson Medical College of Philadelphia, held its commencement exercises on Saturday, March 11th, at 12 M., in the Academy of Music. One hundred and forty-one gentlemen received the diploma of Doctor of Medicine. Dr. Addenell Hewson presented to the college, in behalf of the Alumni Association, a portrait of the late Prof. Dunglison, after which Prof. Pancoast delivered the valedictory address.

The University of Pennsylvania, medical department, held its commencement exercises March 10th, in the same place. There were 124 graduates. The valedictory was delivered by Prof. Alfred Stillé.

Dr. Henry F. Askew, of Wilmington, Delaware, died of apoplexy, March 5th, 1876, aged 76 years. He was a successful practitioner, an ardent and leading politician, and was at one time named for Governor of his State, and at another time United States Senator. Both of these nominations he declined. In 1867 he received the high honor of an election as president to the American Medical Association.

Hospital Appointments.—In Dublin large premiums are paid for hospital appointments. In the Jervis st. Hospital five hundred pounds sterling—three hundred to the foreman incumbent and two hundred to the hospital—is said to be the customary sum.—*Philadelphia Medical Times.* Some of our friends in New York have paid more than that to secure a simple professorship.

The Presbyterian Hospital Affair.—The *London Medical Examiner*, at the conclusion of a lengthy editorial on the subject, says: "It amounts to this, that unless the members of the medical staff consent to be the creatures of the Board, to have no opinion of their own, and to think, and speak, and vote according to the ascertained wishes of the leading member of the Board, they are to be cashiered. A secret tribunal—a star-chamber—is to be constituted, in which personal pique is to arraign and condemn unheard, and without appeal, all whose views are suspected to be at variance with those of the judges; private information being accepted, and trial by jury being set aside. A more monstrous claim than this to be made in the nineteenth century by the managers of any hospital we cannot conceive, but it is only a little more astonishing than the fact that eleven medical men in New York have been found willing to accept office at the hospital under such conditions. The candidature of these gentlemen is greatly to be regretted, because it strengthens the Board in the maintenance of a position morally untenable, and weakens injuriously the influence of the medical staff as a body. All who are acquainted with the management of hospitals must be aware that there are occasions when it becomes necessary for the medical staff to oppose some contemplated action on the part of the lay authorities, or to support with all the weight of their united influence some improvement or alteration which the Board may be unwilling to effect. These are the occasions when union is shown to be strength, and disunion is equivalent to disregard and defeat."

Effect of Extreme Cold on Mind and Body.—M. Payer, the eminent Arctic explorer, referring to a certain day on which the thermometer indicated 58 Fah. below zero, says that so great an amount of cold paralyzes the will, and that, under its influence, men, from the unsteadiness of their gait, their stammering talk, and the slowness of their mental operations, seem as if they were intoxicated. Another effect of such cold, mentioned by M. Payer, is a tormenting thirst, which is due to the evaporation of the moisture of the body. It is unwholesome, too, to use snow to quench the thirst, as it brings on inflammation of the throat, palate, and tongue; besides, a temperature of 35½° to 58° below zero, Fah., makes it taste like molten metal. Snow-eaters in the North are considered as feeble and effeminate, in the same way as is an opium-eater in the East.

The Use of Well-Water in the Cities.—The State Geologist of New Jersey, in his recent report, calls attention to the habit still in use in some of the older cities of New Jersey, of people drawing their supplies of water from old wells. In an analysis of the water coming from some nine wells in Princeton, five of them were found to contain free ammonia, albuminous matter, and chlorides in excess. In tracing the effects of these waters, it was found in almost all cases that diarrhœa and typhoidal fevers accompanied their use. It is almost impossible to be sure of the good quality of any well which is surrounded by houses, where drains and sinks empty into the surrounding soil. It would be well if not only the proprietors of large country hotels of summer resort would look more closely to their sources of water, but should eschew well-water entirely. For the health of their guests, it is better in all cases, where running water does not exist, to seek their source of water from cisterns which are fed from the rain-fall on the roofs. Wherever such rain-water is used it may be safely stated that there is an entire exemption from the diseases which always attend the use of water contaminated with putrefying organic matter.

Infant Mortality.—*Le Bulletin Français* has called attention to a plan which has in view a diminution of the extraordinary death-rate among infants. It is stated that among 100 individuals in France there are reckoned only 2.55 births, while in Russia there are 4.77. Other countries offer intermediate proportions. Thus 100 marriages in Prussia give 460 infants; in France, only 300. The annual excess of births over deaths calculated for a million inhabitants is in Norway and Prussia about 14,000; in Russia and Sweden about 12,000; in Spain and Portugal, 8,500; and in France only 2,400. It appears from such statistics that the population of France would double in 170 years, while 42 years would suffice for Prussia, 52 for England, and 66 for Russia. Worse than this, however is the fact, as stated by M. Brochard, that 100,000 nurslings annually die in France from starvation and misery. It appears, too, that while infants who are

nursed by their mothers or by wet nurses at home die during the first year in the proportion of 8 or 10 in 100, those who are placed away from home, under hospital care and municipal direction, give a mortality of 30 to 36 in 100, and those who are intrusted to nurses in the provinces show the enormous mortality of from 50 to 70 in 100. With the design of developing maternal nursing, therefore, and of caring for the nursling when it has to be removed from the family, there has been instituted in Paris, under efficient auspices, the Protective Society of Infancy.

Medical Degrees for Women in Great Britain.—A bill to amend the medical act as far as it relates to the registration of women who have taken the degree of doctor of medicine in a foreign University, is now before the British Legislature. The present law refuses to recognize men as practitioners of medicine who are not possessed of British qualifications, but it is proposed to make exceptions to this in favor of females. On this subject, the London *Lancet* truly says: "If certain foreign boards of examination are to be recognized as competent to say what persons are fit to practise medicine in this country, it is absurd to restrict the recognition of their competency to the case of females only. The Legislature would surely not commit itself to so silly an enactment as that of two persons, one a female and the other a male, possessed of foreign degrees, the female should be admitted to the Medical Register, and the male should not. This would be a curious way of remedying the partiality of past legislation. It is not by such measures that the doctrine of the equality of the sexes is to be promoted."

Weston's Pedestrian Feats are attracting considerable attention in London with scientific men. Among others Mr. Ashburton Thompson, of that city, has been keeping account of his condition, with a view of a full report of the case, and Dr. Pavy, of Guy's Hospital, has been more particularly engaged on the analysis of the urine, with a similar object in view.

Alumni Association of the Miami Medical College, Cincinnati, Ohio.—The regular annual reunion of the Alumni Association of the above college took place February 28, 1876. The following officers were elected for the ensuing year:—*President*, Dr. B. Stanton, City; *Vice-Presidents*, Dr. R. C. Bond, Aurora, Ind.; Dr. T. S. Neal, Dayton, Ohio; Dr. J. D. Gatch, Laurensburg, Ind.; Dr. W. M. DeWitt, of Longview, Insane Asylum; Dr. F. R. Evans, Franklin, Ohio; Dr. S. L. Ensininger, Crawfordsville; *Secretary*, Dr. William Judkins. *Treasurer*, Dr. J. L. Cilley. *Ex-Committee*, Drs. Wm. B. Davis, A. D. Bender, and L. A. Shepard.

Dr. Thos. A. Neal, of Dayton, Ohio, Class of '54, was elected orator for the reunion of 1877.

The retiring President, Dr. W. T. Brown, in an eloquent and appropriate speech, addressed the association, and welcomed the graduates of '76. On behalf of the latter, Dr. Allison Maxwell made a fitting and a very happy response. The oration, *the* feature of the evening, was delivered by Dr. G. R. Patton, Class '55, of Lake City, Minn. His subject, the "Medical Pendulum," was handled in a very scholarly way. The usual toasts were responded to, and the affair was altogether a great success.

The City Mortality for the Past Year.—From the Report of the Board of Health for 1875, now in the course of preparation, we learn that the number of deaths for 1875, from all causes, in this city, was 30,709, which is an increase of 1,984 over the number reported for 1874. Of this number, 10,908 were from zymotic diseases, an increase of 1,106 as compared with the mortality from this cause for 1874. There were only 1,186 violent deaths reported for 1875, which was 62 less than during the previous year. There were 646 more deaths from diphtheria in 1875 than in 1874. There was also a considerable increase in the mortality of children under five years of age, as compared with that of 1874. Dr. Elisha Harris, the ex-Register of Vital Statistics, states in his report that for three years diphtheria has been adding largely to the mortality among the children in this city. Until recently there has been only a small amount of this disease south of Fourteenth street, and that has been chiefly confined to the Seventeenth Ward, the region of the old Stuyvesant meadows. In this ward, in 1873, there were 2,302 fatal cases of diphtheria; in 1874, 2,193, and in 1875, 2,486, in a population of 101,094. In the Nineteenth Ward the number of deaths from diphtheria was 13,589 for the three past years in a population of 117,835. In the Twenty-first Ward, including the Murray Hill district, in a population of 58,883, in the past three years, there were 6,284 deaths from diphtheria. Cleanliness and disinfection of the premises are recommended, and the isolation of cases as much as possible. In 1875, 3,352 children under five years of age died from diarrhœal diseases in this city. Great improvements have been made in the tenements, in consequence of which it is claimed that the poor of New York enjoy greater advantages than in the great European cities, particularly Berlin, Munich, Breslau, or Liverpool.

How to Preserve Leeches.—Dr. Andberg has given the results of his experiments on the preservation of leeches. He experimented by placing five unhealthy leeches in a glass jar half filled with water, and containing about an ounce of the common black oxide of manganese well pulverized. For the sake of comparison he also placed five healthy animals in another glass jar similarly prepared. Both jars were then exposed to strong daylight. After four or five days small bubbles began to rise from the bottom, and the diseased leeches began to present a more lively and healthy appearance. The water was not changed for three weeks, when it became necessary on account of the death of two of the animals. The remaining three continued well, and no further change of the water was necessary for many weeks. The other five leeches continued to remain healthy, though the water was not changed for eight weeks.

In another jar, prepared in the same way, he placed four leeches that had just been used. The water was changed in a few days, as the leeches had thrown off much blood, after which no further change was necessary for two months.

Dr. A. says that much time and expense may thus be saved in hospitals where leeches are extensively used. —*Usp. Läkareför. Förhandl.*, I.

Weekly Bulletin of Medical Socities.

Saturday, March 25th.—N. Y. Medical and Surgical Society.

Monday, March 27th.—Medical Society of County of New York.

Tuesday, March 28th.—Yorkville Medical Association.

Friday, March 31st.—Medical Journal Association. "Report on Diseases of Women," by Dr. Paul F. Mundé.

Original Communications.

THE DISCOVERY OF MODERN ANÆSTHESIA:—A CRITIQUE.

By H. P. STEARNS, M.D.,

HARTFORD, CONN.

Columbus conceived the idea, or received it from the records of voyages made by mariners before his time, that one, by sailing due west, would discover land. He accordingly acted upon this suggestion, left Spain on the 3d of August, 1492, and on the 12th October discovered one of the Bahama Islands.

To avoid references to authorities in the several portions of this paper when they might seem to be required, I will here remark, once for all, that every essential statement made has been substantiated by the sworn testimony of disinterested persons—holding the highest social positions in Hartford, as well as of physicians, clergymen, and lawyers—such evidence as would be deemed sufficient to vindicate claims in any of the courts of justice in this or other countries.

He afterwards made these voyages, discovering several islands and the main-land of the new continent, though not himself aware of the fact. Through the machinations of his enemies, he was sent home from the field of his discoveries in chains; and, finally, after suffering disgrace and the ingratitude of his king during seven weary years, he died in poverty and neglect; not even knowing, himself, that he had added a continent to the wealth of the world! During the latter part of his life, and for years after his death, others claimed the honor of his discoveries, and sought to reap the emoluments arising from them.

Jenner, when a student in medicine, heard from a young woman that she could not take small-pox, because she had already had cow-pox. This suggestion he never forgot; but not until 1796 did he actually make the test, and demonstrate it to be a fact, by vaccinating James Phipps. He immediately wrote to his friend Gardner, that he had at length accomplished what he had so long been waiting for; and with exultation declared that the boy had since been vaccinated for small-pox without success, as he had ventured to predict. After making other experiments (unfortunately we do not know how many) he went to London, to make known, more widely than before, his discovery. His reception was disheartening in the extreme. Not only did the doctors refuse to make trial of the process, but the discoverer was accused of an attempt to "bestialize" his species by introducing into their systems diseased matter from a cow's udder. He returned home, with surprise and chagrin, and afterwards published an account of seven (7) successful cases.

But it was not until about a year afterwards that his discovery began to be looked upon with any favor, and then it was brought about by one Mr. Cline, who had been successful in vaccinating some persons. Some of his medical brethren undertook to rob him of the honors of his discovery; and it was not until some three or four years after his first experiment that vaccination with vaccine from cows came to be accepted by the profession, and he honored as its discoverer.

Wells, on the 10th Dec., 1811, witnessed some experiments made with nitrous oxide, and saw one person while under its influence bruise himself severely. After the effects of the gas had passed away, he questioned this person as to his injuries, and learned, to his surprise, that he was unaware of any. He then made the suggestion to David Clarke that one could have a tooth extracted without pain while under the influence of that gas. The next day he took the gas, and had a molar tooth extracted without pain by his friend Riggs. During the next few weeks he tried the experiment upon fifteen (15) persons, extracting teeth in all cases without pain, except two. These thought they felt a little pain. Elated with his grand discovery, he started for Boston to make it known more widely than could be done in Hartford. He at once went to his former pupil, Dr. Morton, and to one or two surgeons, all of whom received his statements with much incredulity. After waiting several days, he succeeded in getting an opportunity to test his theory once, in the extraction of a tooth; but, as the bag containing the gas was removed too soon, the patient made some noise and shouted; and in consequence the audience of medical students hooted and hissed, and called the whole affair "*a humbug*."

Wells returned home annoyed and disappointed; and being of a sensitive nature, and in delicate health, was quite unwell for several months. He, however, continued to use the gas in his own offices when engaged in dentistry, or with his friend Riggs; and, during the succeeding two years, in as many as fifty (50) cases successfully. One of the surgeons of the city, Dr. Marcy, after a conference with Wells, in relation to the properties of sulphuric ether as compared with those of gas, used ether, and removed an encysted tumor without pain, while Wells was present. He encountered great obstacles in vindicating his claim as discoverer, because his former pupil, Dr. Morton, laid claim to the honor of discovery, in consequence of having succeeded with ether in 1846. Wells, having exhausted his slender resources, and stung by the treachery and ingratitude of one to whom he had revealed the steps to his discovery, both in respect of gas and ether, after nearly two years of effort to vindicate his claim, became insane and died.

The above three cases rest upon precisely the same kind of evidence, and have points of remarkable similarity. Each of the parties had a definite idea in his mind and announced it to others. The first, that by sailing due west from the southern portion of the European Continent, one would discover land. The second, that the system was so constituted that it would become insensible to the poison of small-pox, by first becoming vaccinated with cow-pox. The third, that the system was so constituted, that by inhaling enough nitrous oxide gas, it would become insensible to the pain of surgical operations.

Each of them succeeded in demonstrating that his idea was a truth, before any other person laid claim to having done so. Two of these parties found great difficulty in convincing the medical profession that they had made a discovery of incalculable value to the world. They all had rival claimants to the honor of discovery, and years passed before the completeness and full significance of their discoveries were understood.

There no longer exists any doubt as to whom the honor of discovery belongs in the first two cases; and the third is so similar, in all the essential points pertaining to a discovery, that a mere statement of the case, in conjunction with the others, would seem to be enough to place it beyond dispute.

And, since the American Medical Association, and other learned bodies, and men, both in this and other countries, have pronounced in favor of Wells as the rightful discoverer of modern anæsthesia, his friends

might well rest content, and let posterity do, as it has done in the other cases, award to each his rightful niche in the gallery of discoverers.

But the friends of one of the claimants, with a pertinacity as great as that shown by the Court of Spain in its efforts to detract from the honor of Columbus, still persists in keeping his case before the public, and in endeavoring to secure honors and emoluments which rightfully belong to another. In fact, our Boston friends, with a pardonable pride in matters of *scientific discovery*, not unfrequently formulate their convictions thus:—

"W. has shown this, and J. that; but it was reserved for our own M. to make the imperishable discovery. And it seems probable that the average Bostonian still believes that modern Anæsthesia was first discovered by inhaling ether."

Therefore it is a matter for special congratulation on the part of the friends of Wells, that this latest effort on behalf of Morton has been presented by no less a person than Professor Henry J. Bigelow, M. D., of Harvard University.* This is specially gratifying, because we may be sure, that one who has from the first been deeply interested in, and identified with, the ether claim, and has done far more for it than Morton himself, will be sure to present the case with learning, as well as every available argument in its favor. If, therefore, a critical examination of Dr. Bigelow's arguments shall eventuate in showing that they are unsound; that, in fact, they are wide of the subject he undertakes to discuss, pertaining to improvements since, rather than to the subject of discovery; and that Morton obtained his knowledge of anæsthesia from Wells, in the first instance, instead of by discovery; and that his work was a mere continuation of what Wells had already shown, and to be ranked with the labors of Sympson, Richardson, and others—I think we may let the case rest.

Let us therefore examine the views of Dr. Bigelow, in reference to Wells's claim, in the light of history, as shown in the two cases already presented. And that there may be no misunderstanding in the use of terms, it may be well to define two or three as preliminary.†

1st. A discovery is "the finding out or bringing to light something before unknown."

2d. "*An Anæsthetic* is an agent which produces anæsthesia by being received into the lungs in the form of vapor or gas, and passing with the blood to the nervous centres on which the action is exerted."

Examples: chloroform; sulph. ether; nitrous oxide; chloric ether.

Using these definitions, we find the discovery of modern anæsthesia to be the bringing to light or making known what was before unknown, viz., that the body can be rendered insensible to surgical pain by the inhalation of one of the above-named substances.

Did Wells conceive this idea and convert it into a certainty before Morton did? Dr. Bigelow admits his priority of inception, but denies that he demonstrated its truth. He considers that thirteen (13) cases of painless extraction of teeth were insufficient for this purpose—that the partial failure in rendering two of his first fifteen cases insensible vitiated his proof and rendered it inconclusive. Let us look a little more closely into this view of the subject. What did these two partial failures render inconclusive? Was it that the body could be rendered insensible to pain by breathing nitrous oxide? Certainly not! That must, in the nature of things, have been a fact since man and nitrous oxide have existed. Neither Wells, nor any one else created this fact. It is a fact now; it was a fact then; it has been such in all ages; and Wells, when he brought to light this fact on the 11th Dec. 1844, thereby became a discoverer. We now know, and he suspected, why he partially failed in those two cases. A few more inspirations of gas would have rendered them just as perfect as his other cases; and I fail to see how this circumstance affected in any way the essential fact.

Let us see how Jenner would have fared in Dr. Bigelow's review. When he had made but *one* successful vaccination, he proclaimed to his friends that he had demonstrated his prediction; and the date of that first successful vaccination has been celebrated ever since as the time of his discovery. Was it made then or afterwards? If afterwards, when? Was it with his second, or fifth, or seventh case? Jenner evidently thought it was with his first.

If, then, Jenner's discovery is universally conceded to have been when his first case proved successful, why not Wells's also? Wells no more needed fifteen or one hundred and fifty cases to make his a discovery, than Jenner.

Again, take the case of Columbus. When do we date the discovery of a new continent by him? Why on the day that he first descried that little island. The continent was not discovered, except prospectively, for years afterwards, or until his third voyage. This developed or grew out of the island discovery. Was it, therefore, any the less discovered? Or if Columbus had died previous to his third voyage, would he any the less have been entitled to the honor of having discovered a new continent?

Let us now refer to the question of *certainty*. Dr. Bigelow lays much stress upon the seeming failure of Wells in his experiment before the Medical Class in the Massachusetts Hospital. Does this failure (if it was one, which is by no means certain) in any way invalidate Wells's claims. I think not. The anæsthesia had been perfect in his former thirteen (13) cases. Dr. Bigelow admits that insensibility by nitrous oxide at the present time is "unfailing." Does a failure to secure it on one occasion affect the question at all? Would it do so now? If not now, why then?

Suppose Columbus had perished in his second voyage; on account of the unseaworthiness of his vessels; or for any other reason, had failed to reach the islands he had discovered during his first voyage, would this failure have, in any way, affected the fact of his discovery during his former voyage?

Or let us suppose that the first case in which ether was given in the Massachusetts Hospital, had been one, such as we are all familiar enough with now—a person of full plethoric habit and accustomed to the free use of stimulants; and, in consequence, that after ether had been given a few minutes, he had begun to shout and struggle, that his face had become livid, his eyes partially fixed, and he had exhibited symptoms of becoming asphyxiated. Let us suppose Morton to have been a stranger, with only one or two friends who really knew nothing about the effects of ether, or if anything, only enough to make them doubt as to its safety—that the audience was one of students, attracted by curiosity; under such circumstances, which we all know might have occurred, can we doubt there would have been shouts of derision, and, if the operator had continued, of denunciation and interference, long before etherization had become

* Dr. Bigelow's paper appeared in the January number of "The Journal of the Medical Sciences," with the title of "The Discovery of Modern Anæsthesia."

† This really becomes necessary, as there seems to be so much confusion in the mind of Dr. Bigelow with reference to the ordinary signification of terms.

complete? Yet it would simply have been a repetition of Wells's experiment, or rather worse, and signified nothing in reality as to the merits of the case.

Again, Dr. Bigelow says that Wells failed, because he did not show that anæsthesia by nitrous oxide was "*inevitable*." In another place, he admits that anæsthesia by nitrous oxide is now inevitable. If so now, why not then? Do facts in nature change? Hear his explanation—We now give a much larger dose!! Does he know how much Wells gave. We know he gave enough to produce anæsthesia in thirteen cases. He knew no reason why he should not do so in all cases. If, through inadvertence or mistake, he, or any one else, gave too little, twice or thrice, does it affect the fact of discovery? Would it have affected Jenner's discovery, if vaccinations had failed in three or four of the first fifty cases, through neglect to use fresh matter, or through its imperfect introduction? How often do we now fail for this very reason. There has never been a time when such failures have not occurred. Vaccination is not now, nor has it ever been as *inevitable* as anæsthesia by nitrous oxide.

Do we any the less honor Jenner as its discoverer?

Why, then, should Dr. Bigelow think that too small a dose in a few of the first cases of anæsthesia should render Wells's claim void? If now, after thirty years of experience, we found that only nine (9) out of ten (10) persons could be rendered insensible to pain by inhalation, anæsthesia would be still one of the most wonderful discoveries of the age, and of inestimable value to mankind.

Again Dr. Bigelow says, Wells failed because he did not prove that anæsthesia by nitrous oxide was "*safe*." Is it safe now? If now, it was then. Wells never found it otherwise. Was anæsthesia by ether safe during the first month of its use? Neither Dr. Morton or Dr. Bigelow knew that it was safe in the first case, or the first fifty cases. In fact, some time after it had been used in the hospital, Dr. Bigelow says Morton did not know in what the danger of using it consisted, but was on hand with a bag of oxygen. But, surely, we need not argue the question of safety, as we all must know that it has nothing whatever to do with the fact of discovery, but is merely an incidental. I very well remember hearing, when a medical student, Dr. Bigelow, while discussing the question of the safety of anæsthesia, say, that if it were certain one person out of a supposed number (I forget precisely the number, now) who should be rendered insensible by etherization, would die, still the discovery of anæsthesia would be one of inestimable value—that the risks should be taken as we take them in travel by railways and steamships. So much for Dr. Bigelow's three points which he considers essential to modern anæsthesia. They are all incidentals, merely; and, though important, as indicating the value of the discovery, yet, in the nature of the case, could only become known, long after both Wells and Morton made their claims.

It appears to have dawned on the mind of Morton after some years, that his claim could not rest on the fact of discovery, and in another part of Dr. Bigelow's paper the line of argument is changed. He says, "But Morton also urged that this was not a discovery in science, but in art; that surgical anæsthesia was due, not to any scientific novelty in the long recognized ether insensibility; but to his having worked out the application of this insensibility to use in art, with enterprise, and perseverance, through many details, in the midst of dangers, till he gave to the world a perfected system of efficient and safe anæsthesia. Morton was right again."

Let us analyse this view a little. Not a discovery in science, but in art; *i. e.*, the *manner* of administering ether! Neither Morton nor Dr. Bigelow took this view, when his claim was made, nor until years afterwards. They at first claimed that he had discovered a *fact*, and one of the most wonderful and useful ever brought to light in sciences. But finding, later, that they could not vindicate this claim, because Wells had proved his earlier discovery, they then try to make the *manner* of administering ether cover the whole ground.

If this view is correct, anæsthesia has been discovered every time any one has found an improved method of giving ether; or ascertained that it could be produced by chloroform, or chloric ether, or other anæsthetic. No one now gives ether in the same way in which Morton first gave it; the *modus operandi* has changed again and again. The great fact of modern anæsthesia lies back of any *manner* of producing it, and this it was which Wells discovered, when he demonstrated that the body could be rendered so insensible to pain that a nerve could be lacerated or torn and the person not know it. No person had ever done this before, or made any such claim. The argument as to *method*, if used by any one less eminent than Dr. Bigelow, would be deemed puerile by scientific men. We might as well say, that the discovery of America consisted in improving the art of navigation, because one could, by this improvement, reach the continent more *certainly* and *safely*!! or that the discoverer of a new planet is he who succeeds in so improving a telescope, or in making a better one, that a planet discovered two years before, could be more easily or certainly found again!!

Again. Does the working "out the application of this insensibility to use in art, with enterprise and perseverance, through many details, in the midst of dangers," rightly constitute Morton the discoverer of modern anæsthesia? I fail to see how it does.

The truth is, there has never been a great scientific truth discovered, concerning which there was not additional knowledge afterwards coming to light. Newton is supposed to have conceived the idea of the law of gravitation, when he saw the apple fall while sitting under the tree, and afterwards demonstrated the existence of such a law or condition; but how little did he at first comprehend the whole system in all its details and extent.

The Brothers Pinzon, with wonderful perseverance, and in the midst of great dangers, succeeded in making many discoveries additional to those of Columbus; and either they, or somebody else, first showed that Columbus had discovered a continent, instead of the confines of Asia. In fact, they and others did immensely more towards developing and bringing to light, and thereby rendering the discoveries of Columbus valuable, than Morton has ever done in relation to Wells's discovery. All this has not changed the verdicts of mankind, nor in any measure dimmed the honor of Columbus. Can it be possible that posterity will not render a like verdict for Wells?

Before proceeding further, I must refer to an effort by Dr. Bigelow in the first part of his paper to rank the results of Wells's labors with those of Sir Humphrey Davy. He says: "In 1844 Horace Wells appeared, exactly repeating the hypothesis Davy had pointed. Davy commenced it, and the scientific world knew it. Did Horace Wells convert into a certainty the probability of Davy? He did not."

Let us examine this proposition a little. As preliminary, however, we will refer to a remark of Dr. Bigelow, in his preface to the extract containing Davy's

suggestion. He says: "It is impossible to read the annexed statement without renewed amazement, that this great blessing to animal existence was distinctly offered to scientific men, and as distinctly rejected by them, for half a century. The great discovery was here clearly pointed out to every tyro in medicine and chemistry. It only remained for somebody to test this hypothesis, this guess, and to convert the guess into a certainty."

What "great blessing to animal existence" was so distinctly offered to scientific men by Davy? Was it an improved method of administering ether? Not exactly! What was it? Why that "as nitrous oxide in its extensive operations appears capable of destroying physical pain, it may probably be used with advantage during surgical operations." This is the suggestion, the guess. It has nothing whatever to do with *mode, safety* or *completeness*. Yet Dr. Bigelow says it only remained for somebody to test this guess, and convert it into a certainty. He here seems to have a correct idea as to what constitutes modern anæsthesia. He is now, however, dealing with Davy. Is anæsthesia one thing with him when discussing Davy's suggestion, and another when discussing what Wells did? It has this appearance.

But it only remains to test this "guess." Pray how shall it be done? How is it likely Davy would have done it? If he had been a dentist, very likely he would have drawn a tooth. If he had been a surgeon, he might have opened an abscess or amputated a finger. Either of these would have been a test, and if there had been no pain a very conclusive one; and he would very likely have said, as Jenner did after his first successful case of vaccination, that he had converted his prediction into a certainty. Do we think there would have remained any doubt in his mind if he had found the same result in a dozen cases? Would he not have been warranted in saying to the world, "I have tested my prediction, I have demonstrated its truth?" If he had done this, would Dr. Bigelow have questioned his conclusions, or denied him the honor of discovery to-day? His whole language indicates the contrary. Yet he says Wells did not apply the test to this guess. So far as I know, there is not the slightest reason for supposing that Wells had any knowledge of Davy's suggestion, or that he obtained it from any one. We have seen how he came to have it—and that, to test it, he lacerated the nerves of more than a dozen persons, and then went to Boston for the purpose of making known the results and using it in a case of amputation in the hospital. His failure in Boston was no greater than that of Jenner in London. He and his friends continued to use it till his death. And yet Dr. Bigelow says he left the knowledge of anæsthesia "just about where Davy left it half a century before." I do not believe a more unjust, harsh and illiberal statement has been made in the discussion of any question of discovery or science during the last half century.

During the whole anæsthetic controversy great stress has been laid on the fact that Wells, after his disappointment in Boston, in a measure left the practice of dentistry and engaged in other pursuits which furnished him a more active life. This has been magnified by Dr. Bigelow and others into a total abandonment of his discovery. His family and his professional friends have testified again and again that this was not true. Moreover, his widow now has the bags for holding the gas which she made for him in the year 1845, and she was making them from time to time because he wished to increase the doses in certain cases. His friend Riggs was using it during the same year, and now has the book containing the original entries of his charges. Dr. P. W. Ellsworth wrote to this effect a letter, which was published in the Boston *Medical and Surgical Journal* in 1845; so that the evidence is indisputable; and yet Dr. Bigelow, in this centennial article on the discovery of anæsthesia, is so partisan as to ignore this evidence and reiterate the old story.

Again, not only were Wells, Riggs, and others using nitrous oxide in Hartford during 1845, but Morton was thoroughly aware of the fact; and during that and the succeeding year came to Hartford on at least two occasions, and is known to have had conferences with Wells on the subject, and from him and Riggs learned the fact that ether as well as nitrous oxide had been used. This last interview was only a short time before he drew the tooth of Eben Frost, under the influence of ether, in Boston. Therefore, as the whole truth stands, it is as clear as the light of noon-day that Morton's experiments were simply a continuation of Wells's. In fact, Dr. Bigelow himself, when discussing the claims of Jackson and Morton, says, "There can be no question that Morton knew about ether." Here we see how he came to know about it. He learned from Wells how he had produced anæsthesia with nitrous oxide and ether, as Mr. Cline learned from Jenner how to produce vaccination. The pupils in both cases were the instruments through whom the discoveries were to become more largely known; but what a contrast in their after-conduct!

The letters of Drs. Morton and Wells, dated respectively Oct. 19th and 20th, 1846, are again brought forward by Dr. Bigelow, to prove that Wells had given up anæsthesia by nitrous oxide as worthless. Yet this letter proves nothing of the kind, as we readily perceive, when we understand the impression under which it was written. Morton, in his letter, misled Wells by a false statement. He claimed to have discovered a new "compound" which was vastly superior to Wells's gas or ether. Wells, with the difficulties attendant on manufacturing, keeping, and transporting gas, and the supposed danger of ether, thought Morton had hit upon something likely to obviate these difficulties, as was claimed; and with this impression wrote this letter of congratulation to his quondam friend, as was natural. By doing so, he had not the remotest thought of yielding his claim to the discovery of anæsthesia; and after his visit to Morton, in Boston, returned home, not a little surprised at Morton's claim; having ascertained to his own satisfaction that the "*compound*," or "*letheon*," as Morton called it, was simply ether, which he had already used; knowing the effects to be similar to those of nitrous oxide. We might as fairly expect Morton to have relinquished his claim, because the next year Simpson discovered the anæsthetic properties of chloroform, which does away so far with the disagreeable properties of ether, that it very nearly superseded the use of the latter everywhere outside of Boston for several years.

Did space permit, I should like to refer to other portions of Dr. Bigelow's paper, but it seems hardly necessary to do so; I must, however, again draw attention to the inconsistency appearing between the opening and closing of the article. The subject of his paper he announces as "*The discovery of Modern Anæsthesia*." He closes with an all hail to "The INVENTOR *of the* ART OF ANÆSTHESIA!"

Surely the learned Professor cannot have forgotten, or expect others to forget, the distinction between a *discoverer* and an *inventor*—a *discovery* and an *invention*. His exclamation sounds very much as it would, in speaking of the discoverer of America, "All

honor to the discoverer of the art of steam navigation!" Or of the discoverer of vaccination, "All honor to the discoverer of the *art of vaccinating with a quill, or a spring lancet!!*"

In closing, I think we may fairly formulate what has been done in modern anæsthesia as follows:

1st. In December, 1844, Wells made the suggestion and applied the test in his own person, by inhaling a large dose of nitrous oxide, and having a tooth extracted without pain. He and his friends in Hartford continued to perform painless operations with nitrous oxide (except once, when ether was used) until his death.

2d. In September, 1846, Morton, a former pupil of Wells's, aware of his discovery and repeating his experiments, extracted a tooth without pain, while the patient was under the influence of sulphuric ether. He afterwards introduced the practice of anæsthesia by ether into the Massachusetts Hospital, and from thence it became known to the world.

3d. In 1847, Simpson first introduced the practice of anæsthesia in Midwifery, thereby making known more widely its value. He also discovered the anæsthetic properties of chloroform, and, by his writings and teachings, very largely contributed to introducing the practice of anæsthesia to the world.

4th. Others have since discovered the anæsthetic properties of different vapors, which are more or less used in practice.

The friends of Horace Wells have no desire to detract from the merits of what has actually been done by Morton, or Jackson, or others, in the field of anæsthesia; nor, on the other hand, do they propose to have the great fact of its discovery and first introduction by him ignored or set aside without protest.

THE TREATMENT OF FRACTURED CLAVICLE.

By FRANKLIN STAPLES, M.D.,

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To mention the subject of fractured clavicle and its treatment, is sufficient occasion for a reply that nothing new can be said upon the subject. It is nevertheless a wrong conclusion, though one which we have been too much inclined to adopt, that a thing to be valuable and worthy of our attention must be new.

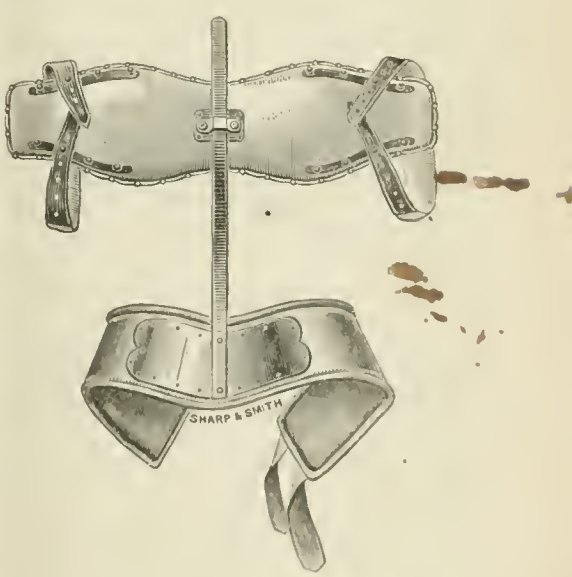
In the treatment which is here presented, it is only claimed that the more important principles of surgery, now fully established concerning this fracture in its more common forms, are met and complied with in a manner generally successful by a simple and convenient apparatus.

The more common fracture of the clavicle—and the one, whether in the child or adult, requiring efficient and careful treatment to avoid deformity, is known to be that generally produced by indirect violence—is usually in the middle third of the bone, is oblique, and presents itself oftener than otherwise with the inner fragment tilted upwards, and with the outer fragment tilted downwards and backwards. The deformity is from the overriding of these fragments with their relative positions as above; or where the fracture is incomplete, it is from an angular protuberance at the point of partial fracture. It is also true and well known that the displacement, especially of the outer fragment, is due to the weight of the arm and the mobility of the shoulder, it having now no bony support, together with the strong action of the muscles of the shoulder and thorax.

Treatment.—There are few cases of fractured clavicle with an overriding or angular deformity of the bone, in which the deformity will not disappear and the fragments fall into place, if the surgeon, standing behind the patient, with the latter in an erect, sitting, or standing position, will place his thumbs on the scapulæ of both sides and extend his fingers over the acromion processes; and thus, grasping the shoulder and pressing upon the scapula, draw the shoulders backward so as to cause the posterior borders of the scapulæ to approximate each other. And more especially will the displacement be found to disappear, if, while the shoulders are held in this fixed position, the arm of the injured side be brought directly against the side, and the shoulder relieved of its weight by a support placed under the elbow and forearm. Now, it is evident, and practical observation will demonstrate the fact, that if the scapulæ can be held thus fixed, the shoulders be kept thus immovable in their relation to the thorax, and the arm be kept thus supported, permanent extension will be maintained on the fractured bone, and in the recovery the least possible displacement and deformity will result.

The gliding of the scapulæ and shoulder, with its outer fragment of the clavicle, to some extent around the thorax, as around a cylinder, is the principal means of correcting the backward and downward tilting of the internal or fractured end of the outer fragment; while putting the whole bone upon a stretch, or at least relieving it of the exercise of its function as the brace of the shoulder, by supplying a permanent attachment for the shoulder behind, obviates the great tendency to displacement and deformity.

To serve the purposes above described, the apparatus represented in the accompanying cuts has been devised.



Five years ago a splint, in some respects similar to this, was presented by me to the Minnesota State Medical Society, and a description of the same published in the *North-western Medical and Surgical Journal*, and favorable mention of the same was made in the Report on Surgery by Dr. Marks, of Milwaukee, to the Wisconsin State Medical Society. The apparatus, as now presented, has been modified and improved, and is manufactured by Messrs. Sharp & Smith, of Chicago.

It has, of course, no patent, and can be improved by any surgeon having the requisite ingenuity. It consists of a curved and padded splint placed across the back on a line with the shoulder-joints. This not only presses firmly upon the scapulæ, but is so curved

as to fit upon the latter in such a manner as to hold them more firmly in a fixed position, both shoulders being brought back as much as may be required by means of stuffed bands attached to the splint at varying distances from the ends of the latter as the form and size of the patient may require. The splint is held in place by an adjustable upright slide of steel, slightly flexible and somewhat bent to the form of the spinal column, the lower end of which is firmly secured to a belt passing around the waist. The apparatus is light, quickly applied, adjustable to different sizes, and easily worn. It has no protuberances that prevent the patient from lying in bed upon the back. To complete the appliance, the usual handkerchief sling enveloping the elbow, supporting the forearm, passing over the opposite shoulder and fastened to the band there, is required.

Prof. F. H. Hamilton, in his treatise on *Fractures and Dislocations*, gives the names of Heister, Chelius, Miller, Keckerly, and others, who "prefer, for this purpose, some form of back splint extending from acromion to acromion, against which the shoulders may be properly secured." Dr. Parker says that splints of this kind, with a figure-of-8 bandage, are better than all other kinds of apparatus ever invented. The same principle is illustrated by the practice of compelling the patient to lie upon the back, with or without a pad between the shoulders, during the whole time required for the reunion of the bone. In this position the pressure from the weight of the chest firmly holds the scapula in position, while the shoulders, from their own weight, fall back into the same position as if bound to a splint. Although this cannot well be done in private practice, yet it was the treatment adopted by Dr. Buck, in the New York Hospital, and has the commendation of Drs. Post and Hamilton.

The splint of Keckerly, represented in the work of Hamilton, was faulty, and not likely to succeed in meeting the indications in any case, in that it was too narrow, without form to fit the back and shoulders, and not provided with suitable means to hold it firmly in position. The failure of this apparatus, and others of similar construction, to secure even the success of the apparatus of Fox, was not from error in principle, but rather from want of the proper application of the principle in the faulty and imperfect construction of the appliance.

The axillary pad is now generally ruled out of good surgical practice because of its uselessness and its liability to injure the nerves and vessels of the arm. Fox's apparatus has good points, but does not secure fixation of the scapulæ and shoulders, hence with its use deformity usually results.

The old trio of indications, "*backward*, *upward*, and *outward*," or rather the arbitrary attempts to meet them, have been productive of much mischief, and the usual want of success in securing good results in the treatment of this fracture has led to general dissatisfaction with all modes of treatment, and it has become quite fashionable among surgeons to adopt a kind of let-alone treatment, on the ground that more or less deformity is inevitable with any treatment. Moreover, it has been said that it is a matter of little consequence whether deformity results from a fractured clavicle or not. But I contend, that while it is far better to have a good result in all cases—for a perfect apposition, at least, favors a more rapid recovery—in some cases it is of the utmost importance to have as good a result as possible, this especially in the case of female patients. It is, then, important in this, as in all departments of medicine and surgery, to have within our knowledge and at our disposal at all times the best possible means of treatment.

THE EFFECT OF MEDICINES UPON THE TEETH.

By J. F. P. HODSON, D.D.S.,

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It is an assertion very frequently made by patients to their dentist, in excuse for a largely decayed or much-filled set of teeth, or perhaps to account for their entire absence, that at such or such a time they had a severe illness, and that their physician had ruined their teeth with powerful medicines.* This is a very popular and deep-seated impression, and prevailing as it does among the most intelligent people, as well as those of other classes, it cannot be properly denominated a vulgar superstition or an ignorant prejudice, for the basal principle upon which they have built their pet theory is, alas, *very* true,—the teeth *have* decayed during the illness, and in some instances even more than during all the previous life taken together. I am persuaded, however, that as to the cause, the allegation is, in the great majority of cases, untrue,* and that the exhibition of acid remedies had comparatively little to do with the matter, and that this little may be reduced to a mere shadow by proper care. I hope to hereinafter show, as well as to offer some suggestions that may prove of service to the physician in warding off from the teeth of his helpless and practically unconscious patient, some of the terribly destructive influences which obtain during this period.

During the latter months of the period of gestation, and in fevers very especially, or the progress of

* It will be, of course, understood that reference is made in this article to substances which *decay* the teeth, and not to those which attack the alveolar and dental periosteums, as do the mercurial preparations.

any illness involving a feverish condition, the fluids of the mouth are constantly as intensely acid, as respects the teeth, as is any medicine administered by the physician; and, moreover, from the high temperature of the buccal cavity at such times, the power of these acids for evil is greatly augmented. Further, a direct consequence of these conditions is the especially rapid fermentation and decomposition of all food lodged between and around the teeth, and the consequent elimination of other deleterious acids,—all forming a mighty power, under which it is not surprising that tooth-structure should melt away like dew before the sun. It is indeed a *very* surprising thing that any tooth should live to tell the tale.

Still further, during such a period and condition of things—when of all times in one's life the mouth needs the best and most faithful care, it, in reality, because of the helplessness of the patient, receives *absolutely none*, and the teeth, poor victims, are left entirely at the mercy of this grand coalition of their enemies, who are all eager to advance their work of destruction, aye, complete it before they shall have again been brought to bay by the conditions of returning health and the tooth brush of the patient. And all this, forsooth, the physician's "powerful medicines" accomplish.

The physician is, however, the strong right arm upon which the patient should lean during illness, at least as to all things directly pertaining to it. To the physician, therefore, I appeal in behalf of all our mutual patients, that they may, by a few timely suggestions, looking to the neutralization of the acid condition then prevailing in the oral cavity, very essentially reduce the dreadful ravages of this period upon the teeth,—such, for instance, as directing the patient to rinse the mouth frequently with *liquor calcis*, diluted according to the sensitiveness of the mucous membrane, and flavored with a few drops of wintergreen or peppermint to make it agreeable; *or* to rub *creta prep.* freely about and between the teeth, and allow it to remain during the night; *or*, if the patient be able to use the tooth-brush, to add a small quantity of *sodæ bicarb.* to the usual tooth powder (for this purpose only, and not for general use); or, in short, the employment of any of the manifold methods of neutralizing the acid condition which may be most accessible at the time.

It may be objected to the foregoing that the mouth, during the progress of a fever, contains but little fluid of any kind; true, but this very circumstance makes the little which is there—the mucus principally—especially concentrated, and correspondingly baneful in its effects upon the teeth; whereas, in a normal condition of the system, the acidity of the mucus is entirely neutralized by the large influx of the alkaline saliva.

The tube through which acid remedies are usually directed to be taken *does not* prevent them from regurgitating upon the teeth in the act of swallowing, so that it practically accomplishes very little of the object sought to be attained by its employment; but if, in addition, the mouth be immediately and thoroughly rinsed with the solution of lime above referred to, or a solution of *sup. carb. sodæ*, the evil effects of any acid remedy upon the teeth will be entirely obviated.

In the exhibition of strong alkalies, on the other hand, which lay hold of the gelatinous constituents of the teeth, the fluids of the mouth during illness are, as has been stated, usually so pronouncedly acid as to entirely neutralize this condition; but if otherwise, a slight rinsing with a very dilute simple acid, like tartaric or citric, will accomplish the result desired, though the effect of these remedies upon the teeth is scarcely worthy of consideration, so entirely will the matter of their neutralization take care of itself. And even at other times than during actual illness is this the case with many of our people, who, with their irregularities, hot foods and drinks, the precipitate haste of their eating, and the half-masticated masses with which their stomachs are constantly insulted, are, even in health (?) much addicted to gastric disturbances, acid eructations, depraved and vitiated secretions, and a generally dyspeptic diathesis,—than which condition, by the way, none could be more inimical to the integrity of the dental structures.

Progress of Medical Science.

PARACENTESIS PERICARDII.—The following abstract is from a case presented to the Connecticut State Medical Society at its last session, by Dr. Irving W. Lyon, of Hartford, Conn.

A robust laborer, aged thirty-one years, was seized with pneumonia April 12th, 1874. The disease, which was confined to the right lower lobe, progressed favorably, so that resolution had commenced April 20th. On the 21st, the patient was seized with acute pain in the precordial region, auscultation of which gave the double friction sound of acute pericarditis. On May 5th, the patient was apparently dying; the area of cardiac dulness was greatly increased; the precordial region had notably bulged; head, face, and neck, very livid and swollen, and the entire body œdematous; pulse feeble and irregular, respiration labored. The vertical diameter of the liver on the mammary line was seven and one-half inches; resolution in the right lower lobe complete; every part of the left thorax yielded exaggerated resonance upon percussion, except that occupied by the distended pericardium.

The operation was performed by introducing a small trocar and canula through the fifth intercostal space, exactly three inches from the median line, and one inch to the right of the left nipple; the point was directed upwards and backwards, with an inclination towards the median line. The instrument entered just two inches, and upon withdrawing the trocar, pus flowed freely until thirty-two ounces were collected. The relief was immediate and marked, so that the patient was removed, in the space of a few moments, from a state of impending death to one of comparative safety and comfort. Six hours after the operation the pulse was 104 and regular, cyanosis nearly absent, and the liver dulness had diminished from seven and one-half to five and one-half inches. Twenty-two hours after the operation the pulse was 96, respiration 20, temperature 98⅘°, and the liver measured but four and one-half inches on the mammary line.

May 7th, two days after the operation, the former symptoms began to re-appear, and the patient gradually lost ground till May 12th, when it was determined to repeat the tapping. This was done in the same manner as before, but only one ounce and a half of pus flowed away, though all present felt confident that the pericardium contained much more. The patient died May 14th, having lived, after the first operation, nine days. No autopsy could be obtained. The trocar and canula were used because the contact of the heart with the aspirator needle, as the fluid subsided, was dreaded.—*Medical Communications of the Connecticut Medical Society*, 1875.

On the Origin and Spread of Carcinoma in the Female Pelvis.—Prof. Freund, of Breslau, believes he has found in the histories and autopsies of four cases, which he reports, new facts bearing upon the history and origin of malignant tumors. Whereas in married women of normal conformation the vaginal portion of the cervix uteri is subject to irritation, not to say injury, in coitus, in the cases of cancer he reports, such possible causes were, for one reason or another, absent. Thus the first case was in a *virgo intacta* of twenty-three, in whom a primary colloid cancer of the rectum extended through the connective tissue to the base of the right broad ligament and cervix uteri, death resulting from peritonitis from perforation. The second case was in a virgin of forty, in whom a villous medullary cancer, which began in the posterior wall of the bladder, gradually involved the anterior vaginal wall, the connective tissue on the left side of the pelvis, the left ureter, and finally occasioned deposits in the outermost layers of the left half of the cervix. In the third and fourth cases, owing to a constriction of the upper portion of the vagina, the cervix being protected, remained free from cancer, although the vaginal walls, and secondarily the rectum, were involved in the disease. These cases, he thinks, suggest the importance of thorough exploration in cases of obstinate catarrhs, or difficulties of excretion in the pelvic organs.—*Virchow's Archiv*, Bd. 64.—*Berlin. Klin. Woch.*, Jan. 18, 1876.

Bouton de Biskra.—Dr. H. Vandyke Carter read a paper before the Royal Medical and Chirurgical Society on this disease, as it occurred at Biskra in 1874. One-third of the soldiers, and more than one-half of the officers of the battalion, were afflicted with the disease. The "bouton" resembles the Delhi boil, so well-known in India, and has been compared with the Aleppo evil. A few days after its appearance, the "bouton" is found to be composed almost entirely of a granulation-tissue. But in addition he found a true parasitic organism, consisting of spheroids and mycelium, which occupied the distended lymphatic vessels in and around the "bouton." At a subsequent stage of the "bouton" these vegetable organisms seemed to disappear, and there were found besides pale, round and stellate granulation cells, numerous bright, orange-tinted particles, which were arranged as spherical or ovoid groups, everywhere disseminated throughout the tissues of the tumor. By microscopic scrutiny, the endemic limitation of the bouton de Biskra, its seasonable occurrence, incubation period, and limited duration, its multiplicity of local manifestation and non-recurrence, and its inoculability, were all satisfactorily explained on the supposition of the parasitic origin of the affection. In the after discussion, Dr. Tilbury Fox said he had examined two preparations of the "bouton" sent over by Dr. Carter, and had failed to detect the existence of any parasitic elements. In the deeper parts of the tissue, appearances like mycelium could be seen, but they seemed rather to resemble ordinary lymphatic tissue. There was very little question as to the inoculability of these affections. Dr. Thin was inclined to believe the disease was in a great degree syphilitic.—*The Lancet*, February 12, 1876.

Mania-a-potu.—Dr. L. A. Dugas, in a paper read before the Medical Association of Georgia, relates his treatment of this disease. It consists of the administration, once or twice a day, of cold water affusions, of such food as may be relished, and at times of two or three small glasses of toddy. If the patient is very unruly, one or two intelligent persons should attend him day and night, as long as it may be necessary. For the affusions, the patient should be stripped of all garments and seated in a tub, the physician should pour one pitcherful after another over the head in a regular stream, which will pass down over the entire body. The affusion is to be continued from one to three minutes by the watch. The pulse, at first full and strong, soon becomes small and frequent. The physician should watch this carefully, and cease whenever the patient is entirely rational and the pulse sufficiently subdued. After the patient is rubbed and dried, and the room darkened, he will generally sleep six or eight hours, and awake perfectly rational. With the exception of toddy, all narcotics are eschewed in the management of the case.

Anchylosis of both Elbow-joints.—At a meeting of the Medical Society of London, Mr. William Adams brought forward a case of this kind, where there had been anchylosis of both arms in the extended position, the result of rheumatic fever three years before. The treatment of the left arm proved successful by subcutaneous division of the shaft of the humerus just above the condyles, after which the forearm was flexed to a right angle, and placed in a rectangular splint. A fortnight subsequently, passive motion was commenced and steadily continued. Forcible extension was used in the right arm, which the left arm resisted,—therefore the subcutaneous division. Mr. Adams referred to the pathology of rheumatic anchylosis, observing that such cases were most favorable for the operation of forcible movement under chloroform, in consequence of the absence of any destructive disease in the articulation. This was the first case where subcutaneous division of the humerus had been performed.—*The Lancet*, February 12, 1876.

Mammitis and Mammary Abscess Treated by Bandaging.—Dr. L. A. Dugas read a paper before the Medical Association of Georgia upon this mode of treatment. To lessen the determination of blood to the mammæ while inflamed, the child is to be suckled as seldom as possible, and gentle compression sufficient to force out the blood from the distended vessels, and cool applications to the organ are the proper remedies. He has devised a bandage which, he believes, combines all the requisites. It consists of cotton or linen shirting, about ten inches wide, and long enough to surround the thorax, and to be secured in front by digitations, similar to other "many-tailed" bandages. This is to be applied from the axilla down, pass around the chest and over the mamma, and be tied in front of the sternum. It effectually compresses both organs, and can be loosened or tightened without any difficulty. The child may be nursed through an aperture for the nipple made in the bandage. As soon as the congestion becomes painful or threatening, the bandage should be applied with such moderate tightness as will relieve pain, and the treatment should be continued until the trouble has entirely subsided. When suppuration takes place, the pus should be let out by the free use of the bistoury, and a linen tent renewed daily. There should also be an opening in the bandage opposite the incision for the escape of pus. This bandage is adapted to every stage of mammary inflammation. If too late to prevent suppuration, it will lessen the size of the abscess, and after an opening has been made for the escape of pus, it will bring together the walls of the abscess and hasten the cure. One of its greatest advantages is that it relieves the patient of all pain as soon as it is applied, by removing the distension to which the unsupported tissues are subjected by the congestion, or the accumulation of pus.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, April 1, 1876.

SHORTENING THE TIME OF STUDY.

To any one who has taken the pains to follow the discussion regarding the relative merits of the different medical colleges at Louisville, the hope of reform in matters of medical education seems a long way off. In the ardor of defending the claims of their respective institutions, the editors of the *Louisville Medical News* and the *American Medical Weekly* are disclosing some rather refreshing facts for the contemplation of the uninitiated.

In Louisville, containing as it does three medical colleges, it is quite natural that a spirited struggle for preferment should be engendered, and that a considerable difference of opinion should exist between them in regard to the adoption of the best means for securing the largest classes and obtaining the most money. This is all well enough, and gives evidence of that commendable desire to aid in educational reforms which is so prevalent in other cities having the same facilities. One of the privileges of every medical school in this country is to claim that it is better than its neighbor, and that it deserves to succeed while the other merits ignominious failure. This is what is usually termed a generous rivalry, and the institution which makes the greatest pretensions and is loudest in its self-praise appeals the strongest to the sympathies of outsiders. If schools have medical organs, so much the sooner can this desirable end be accomplished, provided there is no one to dispute their claims. This is the trouble in Louisville; and it seems so difficult to settle which of the colleges is the best that the journals in question are discussing the matter with more ardor than discretion. The result has been that they have torn each other's drop-curtains, and the audience is allowed a glance of the sham stage machinery behind.

Evidently compelled, for the sake of success in obtaining classes, to meet the requirements of popular demand for short courses, small fees, and cheap diplomas, each school is striving to outdo the other in smoothing the road to graduation. The result of such endeavors can easily be foreseen. The limit of this medical auctioneering must be reached some time or other, and may in the end result as did the famous fight between the cats of Kilkenny. In the meantime each combatant is doing his best to injure the other,—scratch for scratch, blow for blow, and howl for howl. If one college gives two full courses in one year, the other does worse; if one grants beneficiary degrees, the other cheapens its instruction in another guise, and so the fight waxes hot. As far as we can see at this distance, neither one of the colleges is entitled to the countenance and support of the profession of that part of the country, and in fact the necessity for their existence at all, under their present respective managements, is a question which every impartial medical man has a right to consider. If the facts stated by either side are true, there is a system of corruption in the matter of medical teaching there which is melancholy to contemplate. We have not noticed any defence for the yearly two-course system; in fact it is virtually admitted in attempting to justify the course pursued by a reference to similar doings elsewhere. In regard to this particular phase of the question Dr. Gaillard, the editor of the *American Medical Weekly*, says:

"And now for the question of two courses of lectures in one year. Any student in any medical college in this country can go to the Long Island College or one of the Cincinnati colleges in March, and enter upon his second course of lectures; graduating in June of that year; that is in nine months. A good student can do this at these colleges, and also at the University of Virginia. This is well known, or ought to be well known to every journalist in the land. The colleges named are in full affiliation with all municipal, county, and State medical societies, and with the National Medical Association. But these facts are not the facts which suit the partisan purposes of those who have partisan objects to accomplish or personal spleen to gratify. Indeed, a Cincinnati Medical College has for years given and now gives two graduating courses in one year. The Atlanta Medical College has done the same thing."

If this be true, and we see no reason to doubt it, it is high time that the profession looked this matter fairly in the face; it is high time that this monstrous evil should be in some way remedied. What hope can there be for reform in medical education if the system of corruption in so-called high places is allowed to go on, not only unchecked but unrebuked.

THE INTERNATIONAL CONGRESS OF OPHTHALMOLOGY.

SOME twenty years ago, in the city of Brussels, a number of practitioners of medicine who were working specially in a department which the invention of the

ophthalmoscope had brought into great scientific prominence, organized what is called the "International Periodic Congress of Ophthalmology," a body which has held sessions every four years. It met first, as we have said, in Brussels; then in Paris on two occasions; and finally, in 1872, in London. The objects of this organization, as stated by its rules, are "to promote ophthalmological science, and to serve as a centre to those who cultivate it."

The sessions of the society take place every fourth year, and they have usually lasted for about three days. Many of the men most eminent in ophthalmic science have contributed papers and taken part in the discussions at the meetings, so that the volumes of transactions have a permanent value. At the meeting held in London in 1872, there were eleven delegates present from the United States—from Boston, New York, Philadelphia, Rochester, St. Louis and Davenport. The Boston and New York delegations invited the Congress to hold its next session in America; and, after a rather spirited discussion, New York was selected over Madrid. The Philadelphians, not then fully alive, perhaps, to the glory awaiting that city in Centennial year, made no offer of it for a place of meeting of the Congress. Since then, as was seen by the last number of this journal, the International Medical Congress to meet in that city has arranged for a section to be devoted to Ophthalmology, but this must not be confounded with this Congress. The New York committee appointed in London, have nearly perfected their arrangements for the meeting of the Congress of Ophthalmology. It will assemble at Chickering Hall on Tuesday, September 13th, at 12 o'clock noon.

A committee will be in attendance, on the Monday afternoon and evening previous, to enroll members of the Congress and candidates for membership. The American Ophthalmological Society will entertain the foreign guests, together with distinguished members of the general profession, on Thursday evening, Sept. 14, at Delmonico's, and there will be various receptions for the delegates. Professor Helmholtz is expected to visit America, expressly to be present at the Congress, with others nearly as well known. Communications are constantly being received from the old world, showing that the sea-passage does not deter some of our foreign brethren from their usual visit to this Congress when held nearer home. Inasmuch as the discussions of this body take in all of optical science, it is believed that all our eminent physiologists and physicists, as well as the ophthalmologists, will be glad to enrol themselves as members of a Congress which only prescribes that its candidates for membership shall be "either a doctor of medicine, or of surgery, or of science, or possess some other equivalent degree, or be distinguished for scientific knowledge."

The profession in New York, as well as our educated classes, will certainly cordially welcome the assembling of an International Scientific Congress, which is the first to appoint a meeting in the United States.

THE DISCOVERY OF ANÆSTHESIA.

The vexed question concerning the discovery of Anaesthesia being again before the professional public, Dr. H. P. Stearns, of Hartford, contributes, in the present number, a very interesting article upon the subject. Every one who has, during the past ten years, taken the pains to examine the validity of the respective claims of Wells, Morton and Jackson, must be surprised at the stand taken by Dr. Bigelow, and must applaud Dr. Stearns in his praiseworthy efforts to turn the current of opinion in its proper direction. There can be no doubt that Wells was the real discoverer of anæsthesia in its present accepted signification; and that to him, and to him alone, belongs the credit of conferring this priceless boon upon humanity. Dr. Stearns founds his statements upon fact, and the conclusions at which he arrives, based as they are upon sound argument, must carry conviction to the mind of every impartial reader.

MEDICAL ADVERTISING.

The correspondent who favors us with a communication concerning the Medical papers recently presented to the Public Health Association, very properly rebukes the action of their authors as an "abuse of privilege." There is no doubt that the Association is capable of doing a great amount of good in advancing Sanitary Science, and we wish it God speed; but its object can never be attained so long as medical advertising is an incentive for much of the work that is done. It is quite necessary that medical men should be members of such an organization, as they are eminently fitted to offer counsel on all subjects pertaining to preventive medicine. Their duties in that respect can always be satisfactorily performed without the slightest violation of the Code. Teaching the public is one thing, but medical advertising is another. Our correspondent very generously gives them the credit of unintentional wrong, and out of courtesy to such charity we shall not take issue with him.

Reviews and Notices of Books.

Phthisis: Its Morbid Anatomy, Etiology, &c. By Austin Flint, M.D. H. C. Lea. 1875.

Dr. Flint is one of the very few original writers on medicine of whom this country can boast. He neither translates, compiles, nor abstracts from foreign authors. All of his published works have been characterized by the same merit:—a careful study and analysis of cases of disease observed by himself.

In the present work he gives us the results of his observations of phthisis. The study embraces an analysis of 670 cases of this disease. From these cases he deduces conclusions concerning the morbid an-

atomy, the etiology, the symptoms, the fatality and prognosis, the treatment, and the physical signs and diagnosis of phthisis. From the insufficient character of his records, however, only a moderate number of cases can be used for the study of each of these different topics.

We must confess that our feeling, after reading the book, was of regret that Dr. Flint should have sacrificed so much labor for such unsatisfactory results. It is easy to appreciate the patience and the time which must have been consumed in comparing and analyzing so large a number of cases. And yet, as the result of all this time, labor, and patience, what do we find? hardly a single new fact.

While, then, we must thank Dr. Flint for adding to our collection of facts on the subject of phthisis, we must regret that so much good work should be of so little value.

ADDISON'S DISEASE. By EDWARD HEADLAM GREENHOW, M.D., F.R.C.S. Philadelphia: LINDSAY & BLAKISTON.

FROM time to time a monograph will appear on some medical subject, which is so complete, so exhaustive, and so lucid, that for many years all discussion is closed, and the monograph becomes the standard authority on that particular topic. Such is the character of this treatise on Addison's Disease by Dr. Greenhow. It exhausts our present knowledge of the subject. For the next five years at least it will be our authority for all that concerns Addison's Disease.

ON SPERMATORRHŒA: Its Pathology, Results, and Complications. By J. L. MILTON, Surgeon to St. John's Hospital for Diseases of the Skin. Tenth edition. London: ROBERT HARDWICK, 192 Piccadilly. 1875.

IN many respects Dr. Milton's treatise upon this subject is worthy of commendation. Although it is evidently the work of an enthusiast, using the word in the sense in which it is more commonly employed, yet there is sufficient evidence of true enthusiasm to convince the unprejudiced reader that its merits more than balance its demerits. Dr. Milton takes the ground that spermatorrhœa is a disease, and not a mere symptom, as it has quite generally been regarded. "Even though it is nothing but a symptom," says the doctor, "the subject merits all the attention he has given it," and it is quite probable that this is true. The author "rejoices that the battle of spermatorrhœa has virtually been fought and won," and in the present edition of his book the vigor with which he strikes his gatlings into some of his antagonists indicates that he is determined to have his clarion notes heard in triumph.

ILLUSTRATIONS OF CLINICAL SURGERY. (Part II.) By JONATHAN HUTCHINSON, F.R.C.S.

ATLAS OF SKIN DISEASES. (Parts II.—V.) By TILBURY FOX, M.D. Philadelphia: LINDSAY & BLAKISTON. Second notice.

HUTCHINSON'S illustrations include varieties of soft venereal sores, balanitis, melanosis, hydrocele of the neck, and two anomalous unnamed affections of the skin. The plates are excellent, both in the matter of selection and in artistic execution. The letter-press which accompanies them is particularly instructive, and contains many new and original views. With reference to soft venereal sores (chancroids) H. believes that they "are due to the contagion of the pus produced by syphilitic inflammation," and the hard (indurated) chancres "to that of the specific virus of syphilis. The pus acts almost immediately after its implantation, whilst the virus requires an interval before its effects can be recognized. Either may be implanted alone, or both together, and if the latter happens, then a sore which was for the first month quite definitely soft may at length take on induration." It is doubtful if this proposition will at present gain any very general acceptance, although to the mind of the writer there undoubtedly exists a much closer connection between the hard and soft sores than the professed dualist would be disposed to admit. What this connection is, it would be a little hazardous to assert. It is one of the problems which the future may perhaps solve.

FOX'S plates are of the same character as those already noticed, and illustrate strophulus, roseola, lichen, eczema, and impetigo. The text which accompanies them is in the main judicious and instructive, but the nomenclature is Willanic in the extreme; and, however useful in its day, must at the present time be considered as unphilosophical and perplexing, and calculated to hinder rather than increase a diffusion of sound knowledge concerning cutaneous affections.

Correspondence.

MEDICATED SPRAY TO GENITO-URINARY TRACT.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—In your journal of March 18th, Dr. Edson has an article, in answer to a communication of mine, on "The Application of Medicated Spray to the Genito-Urinary Tract."

The doctor, inadvertently, I presume, leads the profession to infer that I claim to have *invented* the Spray instrument; while the fact is, I explicitly state that the instrument I am using is the "*ordinary one*, with the addition of the long arm," &c.

He next calls attention to the illustration, and attacks the engraver for representing the Spray as "flying freely in all directions, and for some distance from the nozzle, indicating that the Spray, *as such*, impinges on the mucous membrane. Had Dr. Edson read my article *carefully*, he would not have made that criticism. I said, that "by the use of this instrument we are enabled to reach every part of the uterine cavity, and bring our medicated substances to bear directly on the mucous membrane."

It will be seen that the point which the doctor attempts to make in reference to "Spray *as such*," is purely at the expense of *the engraver*, and of minor importance.

I now repeat, for the benefit of the doctor, that our medicated fluids are brought in contact with the mucous membrane in such finely divided particles, as to reach the cavities of the womb, vagina and bladder completely, without shock; and the results of such treatment are eminently satisfactory.

Before calling attention to some well-known facts to sustain me in the above statement, I beg leave to protest against the habit in some of criticizing a matter of experience, a fact of practice, on purely theoretical grounds. How can a gentleman who "has had no experience" judge of the value of a fact which must of necessity, be founded almost entirely upon

experiment? The doctrine I maintain is, that in the investigation of morbid action, the physician has *nothing to do* with "preconceived notions." His mind must be free from bias. His convictions derived from an honest and intelligent exercise of judgment in each particular case which presents itself. The treatment of disease deals with pathological, not physiological conditions. However much the walls of the womb may be closed in the natural state, in a diseased condition more or less of a cavity exists; in cases of physometra, for instance, when the womb sometimes becomes *very much* distended with gas. Women lying on the back, with the womb gravitating into the hollow of the sacrum, will have air enter the vagina, pass up into the *cavity* of the womb, and be expelled on a change of position. Again, we know that injections thrown into the vagina have been known to pass through the cervical canal into the cavity of the womb and through the Fallopian tubes. Lastly, we are aware that the process of involution, following delivery, is often imperfect, leaving the walls of the womb flabby and not contracted upon themselves; which fact proves, beyond question or doubt, that there are certain diseased conditions of the womb which would easily admit of applications being made by means of the Spray instrument. For the sake of argument, admitting Dr. Elson's theories "that the cavities of the the womb, bladder and vagina, are always closed," the walls certainly are not *glued together*, (this is a pathological condition not *often* met with, as far as my experience goes,) and they can be separated by the introduction of any instrument. Without doubt, the larger the calibre the larger the cavity.

Now, if my friend will place his patient on her back, introduce any speculum he is in the habit of using, exposing to view the os externum; then, as soon as he is satisfied that the cervical canal is large enough to admit the tube easily, and allow free motion, let him pass the tube to the *fundus*, and, as he gradually withdraws it, let him work the hand-ball. He will succeed in throwing the fluid, finely mixed with air, into the *cavity of the womb*.

In withdrawing the instrument we will notice air and water escaping into the speculum, and since *no solid can occupy the same space at the same time with a fluid*, this in itself should convince him that there must at times be an open cavity in the womb, and demonstrate to him that the practical application of the spray is "as beautiful as the theory." He will have the satisfaction of seeing "the mechanical impediment" he speaks of disappear, and it will leave him with the comforting reflection that "his old-fashioned notions" have been considerably damaged.

E. Bradley, M.D.

1 W. 24th St.

TREATMENT OF DIPHTHERIA.

To the Editor of the Medical Record.

Sir:—Thanking you for your generally accurate report of my paper on Diphtheria, read before the Academy of Medicine, permit me to encroach on your space for the correction of a typographical error or two.

First and most important: instead of an ounce and a half of tincture of iron in the first prescription, the formula given was as follows:

℞ Tinct. ferri perchloridi. ..... fl ʒ jss
Glycerini,
Aquæ, āā..... ʒ j
M

The direction accompanying this prescription, and the following one is, "a teaspoonful to be given *every hour*," (not every two hours,) so that the two shall alternate at half-hour intervals. When the Salicylic Acid mixture is used, it is *instead* of the second prescription, not in addition to it. The total recoveries, out of 124 dispensary patients, was 94.

The quantity of glycerine in the third prescription, is, of course, ℥ss, not ʒ ss.

Yours very respectfully,

C. E. Billington.

A PLEA FOR EXACT BIRTH REGISTRATION.

To the Editor of The Medical Record.

Dear Sir:—Notwithstanding the earnest efforts of the "Department of Vital Statistics" to obtain an accurate record of births occurring in this city, it must be conceded that many physicians neglect the important means of accomplishing it, perhaps not wilfully, but from the present inconvenience, or forgetfulness, much to the disappointment of the department and to their own risk of penalty for the omission. I consider it a matter so intimately connected with the interests of the profession and of society, that we should all take a pride in its perfect fulfilment.

My own method has been to obtain the requisite information from some member of the family before leaving the house, rather than trust to the chance of procuring it subsequently. Whilst it may be objected that the record places the names of the new-comer and parent in a rather miscellaneous group, we may console ourselves with the thought that the inevitable "death record" has no rose-scented, gilt-edge page for millionaires different from that for the less-favored ones of fortune; so that in this, at least, we must all yield alike to the great leveller of our race. Some parties, married late in life, thinking it an impertinent inquiry, may be fastidious about giving their ages, but when informed of the possible future importance of the record for identity, etc., will usually be found to accede with a good grace.

It has always been my plan to enter in a day-book the *hour of birth*, and I propose to show incidentally what I consider may be its necessity in a legal point of view, by a possibility in a case at present within my own knowledge. A youth was left a legacy in trust, payable when he attains a certain age; supposing his birth to have occurred in the evening, the payment to be made in the morning of the day he reaches the required age, of the money disbursed at once by him in previous obligations, and death should overtake him before the hour shown by the birth-record, would not the trustee probably be held liable by the heirs of the young man for any deficiency in the sum thus paid? I think he would, but I may be in error. Again, it occurred to me to have been called on by a guardian to inquire the age of his ward (about to be married), who had asserted her right to the care of her large fortune, and also wished to dispense with further payment of commissions on it. As he had expected to have continued his office one year longer, he was evidently quite disappointed when I told him, on referring to my journal, that the young lady was entirely correct in regard to her age.

I presume that such instances might be multiplied

in the experience of others of the profession; but my object will have been accomplished, if I shall, by this brief statement, only awaken the interest of its members in a much neglected duty.

As somewhat germane to the subject, the following paragraph from this morning's newspaper is added:

"John Stevens, of Logansport, Ind., was heir to $12,000, and at his earnest solicitation the money was given to him when he was only nineteen years old. He has squandered it all, and now sues the trustees to make them pay him over again, his claim being that they should have held the property until he was twenty-one." K.

New York, March 13, 1876.

GLAZED BRICK IN HOSPITAL CONSTRUCTION.

To the Editor of The Medical Record.

Dear Sir:—I have read with interest your recent articles on "Hospital Construction," etc., and am glad to find that the subject is commanding increased attention from some of the most intelligent of our profession.

Nevertheless, the best system of hospital construction yet devised is far from perfect.

The vexed and vital question of drainage is still in an unsettled and unsatisfactory state, and no material yet suggested for interior walls fully meets all the requirements.

In addition to iron, stone, corrugated glass, glazed tiles, etc., suggested by various writers, it has occurred to me that an article of glazed *brick* could be made, that might be found nearly if not quite impermeable to moisture, and suitable for exterior as well as interior walls. Many of the difficulties attending the subject of drainage would not exist if, in the selection of sites for hospitals, this subject received all the consideration it is entitled to. In my opinion, no large, permanent hospital should be located within the thickly populated portions of cities.

In these days of railroads and steamboats, and consequent "rapid transit," all large or permanent hospitals should, if possible, be located outside of the city limits, at some point where all the topographic and and hygienic indications are best fulfilled.

At no distant day the withdrawal of the sick from crowded cities, and their location at points and under conditions most favorable to their recovery will be looked upon as a fundamental rule of hospital hygiene. Respectfully, etc.,

C. B., M.D.

St. Paul, Minn.

CLINICAL STATISTICS OF AN EPIDEMIC OF SCARLET FEVER.

To the Editor of The Medical Record.

Dear Sir:—In The Medical Record of November 20th, 1875, you published a record of the inception of an epidemic of scarlatina which has been in progress in my practice since October last. I have taken notes of seventy-five cases from the number occurring, which directly came to my notice. In fifty of these cases the initial symptom was vomiting—occurring in these fifty cases within the first twenty four hours of the first noted indisposition. In all the cases which proved fatal, vomiting was a persistent symptom.

In twenty five cases the affection of the throat was severe. In these twenty-five cases the only sequelæ which occurred was adenitis, which in some of the patients went on to suppuration. It is worthy of mention here that all of the cases in which a strong liniment of camphorated oil was thoroughly used, the termination was by resolution and not by formation of abscess. In the cases in which adenitis appeared, I discovered no affection of the kidney, no albuminuria, and no œdema, though I examined carefully for them in each case.

The complication of albuminuria and œdema occurred in fifteen cases noted; of these eight could be directly traced either to exposure at too early a period or to particular errors in diet; the other seven showed no complication whatever, save the disease itself. Convulsions occurred in six cases; two at the maximum of the eruption; both of these cases were fatal; four appeared about the eighteenth day. These were speedily controlled by the free use of bromide of potassium, except in one case which had convulsions quite frequently for nearly a week. In this case, a child of eleven years, the pupils were largely dilated, and, I think, the child was blind for the same period. On alternating the bromide with iodide of potassium, the improvement was marked, and convalescence soon occurred. In two cases, abscess of the tonsils appeared within the first five days, simultaneous with the irruption. These cases did perfectly well and recovered without sequelæ.

The shortest duration of any case noted was ten days; the longest, including sequelæ, fifty-five days.

Number of fatal cases, four; of these two died before the fifth day; one on the eleventh day, and one on the eighteenth day. Three of these cases were under the age of eight years, and one had reached the age of twenty-four years, which last had the complication of a diphtheritic exudation in the throat, which came off on the eighth day in the form of membrane, tough and of yellowish white appearance.

The case which was fatal on the eighteenth day had high fever and vomiting from the commencement. The fever was continuous from first to last, not at any time noted to fall below 104 F., nor above 106° F. Quinine was not tolerated by the stomach, and cold affusion was interdicted by the parents, so we had the benefit of neither.

In one case, in the person of my own child, the temperature rose to 107°; rash was purple, and child exceedingly restless; vomited often, and violently delirious. On the third day cold ablution was used, sponging with cold water eight times in one night. After the first bath, child slept one-half hour; awoke restless and delirious; another bath used, slept an hour; the other six used during the night with equally good effect. The baths were used, but not as frequently for the next three days, when desquamation occurred and child made a rapid recovery. The other remedies used in the case were carbonate ammonia and ammonio-citrate of iron, as recommended in Smith's Diseases of Children.

Of the seventy-five cases the respective ages appear thus: *Two* below *one* year; between one and three years, none; between three and six years, thirty five cases; between six and ten years, fifteen cases; between ten and fourteen, seven cases; over fourteen and under thirty years of age, sixteen cases.

David Dana Spear, M.D.

Freeport, Me., *February* 28, 1876.

MEDICAL ESSAYS BEFORE THE PUBLIC HEALTH ASSOCIATION.

To the Editor of the Medical Record.

Sir:—The comments in your issue of March 18th, on what you term "medical advertising," are no doubt based upon a fair and correct interpretation of the code of Medical Ethics. I would remind you, however, and through you, the medical profession, that the Public Health Association of New York is not a medical society. The plan and purpose of its organization had in view the establishment of a society to be composed of persons "selected with especial reference to their acknowledged interest in, or devotion to, sanitary studies and allied sciences, and to the practical application of the same." Consequently, the membership includes gentlemen representing various professions, as well as a number of merchants. It was never intended to be a medical society, and the presentation before it of such papers as those you criticise, in an abuse of privilege which should call for more vigilance on the part of the Executive Committee.

The attendance of reporters at the meetings, by invitation, originated in a desire on the part of the association to disseminate useful knowledge, which should prepare the way for public sanitary reforms. The society, as a body, has never given any encouragement to strictly technical medical discussion, beyond tolerating it with an easy good nature which has been fatal to its usefulness. I think the medical gentlemen who have read papers, and taken part in discussion, upon subjects of strictly professional interest, have in no case intentionally violated either the letter or the spirit of the code. They have merely—and without knowing it—made the mistake of bringing before a society organized for a specific work, matters foreign to its purpose, and, strictly speaking, "out of order."

It is to be hoped that the plan of reorganizing the work of the association, adopted at a recent meeting, will guard against such mistakes in future.

Lay Member.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from March 19th to March 25th, 1876.

Webster, W., Surgeon—Leave of absence extended 20 days. S. O. 49, Military Division of the Atlantic, March 18, 1876.

Meacham, F., Assistant Surgeon—Granted leave of absence for one month. S. O. 56, A. G. O., March 21, 1876.

Hospital Statistics.—The annual report to the Commissioner of Charities and Correction, made by Dr Daniel H. Kitchen, chief of staff of the Charity, Fever, Epileptic, and other hospitals on Blackwell's Island, contains the following statistics, with others: Remaining in the hospitals on Jan. 1, 1875, 388 males and 359 females; admitted during the year, 5,282 males and 4,046 females; discharged recovered, 3,035 males and 2,401 females; improved, 1,561 males and 1,138 females; unimproved, 235 males and 198 females; died, 464 males and 307 females—making a total of discharged patients of both sexes, 9,271; remaining at the end of the year, 435 males and 369 females.

Medical Items and News.

Contagious Diseases in New York.—Through the kindness of Dr. W. De F. Day, Sanitary Superintendent, we shall hereafter be able to present our readers with a weekly tabulated Statement of Contagious Diseases reported to the Sanitary Bureau:—

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
March 18th.....	0	4	83	6	51	128	48
" 25th.....	0	7	70	3	62	71	28

Woman's Hospital, N. Y.—Prof. Fordyce Barker was, at a stated meeting of the Board of Governors of this institution, unanimously elected as one of the attending surgeons, to fill the vacancy created by the resignation of Dr. Sims. This election was the result of a unanimous recommendation of the Board of Lady Supervisors and of the Medical Board. Dr. Barker was previously connected with the institution as consulting physician.

Dr. James Warburton Begbie, the distinguished Scotch scholar and physician, died in Edinburgh, his native city, Feb. 25, of cardiac disease, aged 49 years.

Diplomas of Dead Men.—A correspondent in a recent number of the *Medical Times and Gazette* (London, March 4) asks what becomes of the diplomas of deceased physicians. He doubts not that the great majority of these documents are preserved by the survivors, but he believes that some escape this care, and find their way upon the diploma market.

Spontaneous Rabies.—Mr. Fleming, in a recent number of the *Veterinary Journal* (London) reports a case which bears somewhat upon the spontaneous origin of rabies. A retriever dog, which had always been carefully tended, and was never out alone, was on but one occasion attacked by another dog, healthy at the time and since, and in the course of a month afterwards was seized with all the symptoms of hydrophobia, and was killed. While suffering from the disease the retriever bit three other dogs, one of which was seized with "dumb madness," and was eventually killed. The original biter is still alive and well, but under observation. No one doubts Mr. Fleming's ability to diagnosticate hydrophobia, but it is barely possible that the retriever dog may have been bitten by an actually rabid animal, the fact being unknown even to his watchful master.

Scurvy in the British Marine.—Within the past half year the British mercantile marine has been accredited with more than seventy cases of scurvy. The causes of the occurrence are said to be insufficient anti-scorbutics and bad beef.

A new Clinical Thermometer, the index of which is coated with glass to prevent erasure, is manufac-

tured in London. This is a very desirable improvement, and should be adopted in this country.

Death from Septic Inoculation.—The *London Lancet* (March 4) mentions a case of a woman, "a layer-out," in the Isle of Man, who died as the result of inoculation. She was called to lay out the body of a person who had died of gangrenous erysipelas of the arm. The woman, having pricked her finger with a thorn, hesitated, but ultimately undertook the duty. Subsequently she showed symptoms of blood-poisoning, which ended in her death.

Muscular Exertion as a Cause of Albuminuria. Mr. Benj. Duke, writing to the London *Lancet*, says: "When a student at Guy's I entered for the mile race in the United Hospital Sports. Two days previous to the race I ran a mile. The same evening, happening to be reading a work on the urine, describing how to test the same, I thought, by way of illustration, to test my own. My horror may be imagined on finding it to be nearly solid with albumen. I did not feel ill at the time, and it disappeared within twenty-four hours. The next day but one previous to the race I tested my urine, and found it healthy, and again ran a mile, and on examining some urine passed immediately after, found it nearly solid with albumen, which again totally disappeared in about twenty-four hours, and may therefore be fairly attributed to exercise; for it is now nearly nine years since I have found any."

Prof. Frank Hawthorn, of University of Louisiana, New Orleans, died of Bright's disease, Feb. 24, 1876. He was born in Conecuh Co., Alabama, Sept. 20, 1835, graduated in medicine at medical department of University of New York in 1859, and during the war served as surgeon in the Confederate army. In 1866, he was appointed Prof. of Chemistry in the New Orleans school of medicine; in 1869 he was elected to a full professorship of clinical medicine in the University of Louisiana; and in 1874, he exchanged this chair for the one of diseases of women and children, which he held at the time of his death.

A New Convalescent Hospital.—The elegant hotel at West Point, known as Cozzens', was recently purchased on foreclosure by a lady of this city, who presented it to the Society of the N. Y. Hospital to be used as a home for convalescents. The governors of the hospital are taking immediate steps to adapt the building to its new purposes. Convalescents from the St. Luke's Hospital are also entitled to its privileges.

The Pay of Army Surgeons.—The bill to reduce the salaries in the army, provides that the pay of assistant surgeons shall be $1,500 per annum, and that of the full surgeon (major) $2,500.

Dr. Charles F. Rodenstein, of Tremont, N. Y., died March 10, 1876, from pneumonia. He was a graduate of the College of Physicians and Surgeons, Class of 1867, was Sanitary Inspector of the Board of Health, and a respected and successful practitioner. The following actions were taken by the respective associations of which he was a member.—At a meeting of the corps of Sanitary and Assistant Sanitary Inspectors, held at the Headquarters of the Health Department, Monday, March 10th, 1876, the following resolutions were unanimously adopted:

Whereas, It has pleased an all-wise Providence to remove from our midst our late friend Dr. C. F. Rodenstein, one who has endeared himself to us all by his many traits of kindness, geniality and manly worth, therefore, be it

Resolved, That, in the death of our associate, we have lost a true friend and earnest fellow-worker, whose example we emulate and whose memory we cherish.

Resolved, That a copy of of these resolutions be sent to the family of the deceased, as an evidence of our sincere sympathy, and another published in the Medical Record.

Wm. De F. Day, M. D., *Chairman.*
Allan McLane Hamilton, M. D., *Secretary.*

—At a meeting of the Yonkers' Medical Association, the following resolutions were adopted:

Whereas, Death has removed from our midst one of our most valued members and Ex-President, Dr. Charles F. Rodenstein, therefore, be it

Resolved, That in the death of Dr. Rodenstein, we mourn the loss of a valued brother, a true-hearted noble man, a skilful physician, and a devoted student of medical science.

Resolved, That we tender to the family and friends of our departed brother our heartfelt sympathy in this dark hour of their affliction.

Resolved, That we attend the funeral of Dr. Rodenstein, from his late residence at Tremont, in a body.

Resolved, That a copy of these resolutions be sent to the family of Dr. Rodenstein, and also published in the Medical Record, the *New York Medical Journal*, and the local newspapers.

Committee: J. Foster Jenkins, M.D., J. H. Pooley, Sr., M.D., E. Peugnet, M.D.

March 19th, 1876.

—At a meeting of the New York Obstetrical Society, held March, 21st, 1876, the following resolutions were adopted relative to the death of its late Fellow, Dr. Charles F. Rodenstein, of Tremont, N. Y.:

Whereas, This Society has learned with deep regret the death of Dr. Charles F. Rodenstein, therefore be it

Resolved, That this Society recognize in the late Dr. Rodenstein an active and invaluable Fellow, whose regular attendance at its meetings, costing him a journey of many miles, was a proof of his professional zeal and constant interest in the welfare of the Society.

Resolved, That the death of Dr. Rodenstein is a loss to the profession, of an able and energetic physician, and to society of a gentleman of large culture and genial disposition.

Resolved, That the Society tender to the bereaved family of Dr. Rodenstein their heartfelt sympathy in their affliction.

Resolved, That a copy of these resolutions be sent to the medical journals of this city for publication.

Committee: John Byrne, M.D., James F. Hunter, M.D., Charles S. Ward, M.D.

T. Gaillard Thomas, M.D., *President.*
Paul F. Munde, M.D., *Secretary.*

American Medical Association.—The twenty-seventh annual session will be held in the city of Philadelphia, Pa., on Tuesday, June 6, 1876, at 11 A.M. The delegates shall receive their appointment from permanently organized State Medical Societies, and such County and District Medical Societies as are recognized by *representation in their respective State Societies*, and from the Medical Department of the Army and Navy of the United States. Each State,

County, and District Medical Society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number; *Provided*, however, that the number of delegates for any particular state, territory, county, city, or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the Association."

Secretaries of Medical Societies as above designated are earnestly requested to forward, *at once*, lists of their delegates, in order that the Committee of Arrangements may be enabled to form some idea of the number likely to be present.

Sections.—"The Chairman of the several sections shall prepare and read in the general sessions of the Association, papers on the advances and discoveries of the past year in the branches of science included in their respective sessions. * * "—By-Laws, Art. II., Section 4.

Practice of Medicine, Materia Medica, and Physiology: Dr. Francis G. Smith, Philadelphia, Pa., Chairman; Dr. B. A. Vaughan, Columbus, Miss., Secretary. Committee appointed to report to this section—On Clinical Observations: Dr. N. S. Davis, Ill., Chairman, Dr. H. A. Johnson, Ill., Dr. J. B. Johnson, Mo. Obstetrics and Diseases of Women and Children: Dr. S. C. Busey, Washington, D. C., Chairman, Dr. Robert Battey, Atlanta, Ga., Secretary. Committee appointed to report to this section—On the connection of the Hepatic Circulation with Uterine Hyperæmias, Fluxions, and Inflammations: Dr. L. F. Warner, Mass. Surgery and Anatomy: Dr. Alonzo Garcelon, Lewiston, Me., Chairman, Dr. E. T. Easley, Dallas, Texas, Secretary. Medical Jurisprudence, Chemistry, and Psychology: Dr. E. Lloyd Howard, Baltimore, Md., Chairman, Dr. V. L. Hurlbut, Chicago, Ill., Secretary. State Medicine and Public Hygiene: Dr. R. C. Kedzie, Lansing, Mich., Chairman, Dr. Ezra M. Hunt, Metuchen, N. J., Secretary. Committee to report to this section—On Form of Bill to establish a National Department of Public Health at Washington: Dr. H. B. Baker, Mich., Chairman, Dr. H. A. Johnson, Ill., Dr. M. Toner, D. C.

Papers appropriate to the several sections, in order to secure consideration and action, must be sent to the secretary of the appropriate section at least one month before the meeting which is to act upon them. It shall be the duty of the secretary to whom such papers are sent, to examine them with care, and, with the advice of the chairman of his section, to determine the time and order of their presentation, and give due notice of the same. * * * *"—*By-Laws*, Art. II., Sect. 5.

The following Committees are expected to report:—

On Mechanism of Accommodation of the Eye, Dr. D. S. Reynolds, Ky., Chairman; On New Remedies, Dr. Austin Flint, Jr., N. Y., Chairman; On the Medical and Surgical Uses of the Aspirator, Dr. E. S. Gaillard, Ky., Chairman; On Influence of Climate on Pulmonary Diseases in Minnesota, Dr. Franklin Staples, Minn., Chairman; On the same in Colorado, Dr Chas. Denison, Col., Chairman; On the same in Florida, Dr. E. T. Sabal, Fla., Chairman; On Proper Legislation to Prevent the Spread of Syphilis, Dr. Samuel D. Gross, Pa., Chairman; On Prize Essays; Dr. Samuel D. Gross, Pa., Chairman; On Necrology, Dr. S. C. Chew, Md., Chairman; On Rank of Medical Corps in the Army, Dr. H. A. Johnson, Ill., Chairmam.

W. B. Atkinson,
Permanent Secretary.

Periodical International Medical Congress.—The fifth session of this Congress will be held at Geneva in 1877. A committee of organization has been appointed by the medical society of the canton of Geneva, to act in concert with the scientific section of the National Genevese Institute. This committee is as follows: President, Professor C. Vogt; Vice President, Dr. Cl. Lombard; General Secretary, Dr. Prevost; Assistant Secretaries, Drs. D'Espine and Reverdin; Members, Professor Mayor, Drs. Dunant, Figuière, Julliard fils and Révilliod. The Congress will be exclusively scientific; it will last one week, commencing on Sunday, September 9, 1877. The official language will be French. All communications, whether in reference to the Congress or to questions which may be the subject of discussion, will be acknowledged by the committee. Such communications should be made before June 1st, 1876, at which time the committee will make their final decision as to rules and programme, and will appoint reporters. The Congress will open under the auspices of the Swiss Federal Council and the authorities of the canton, and of the city of Geneva. N.B.—All communications relating to the Congress, should be addressed to the General Secretary, Dr. Prevost, Geneva.

The International Congress of Ophthalmology will meet at Chickering Hall, Fifth Avenue, New York City, on Tuesday, September 12, 1876, at twelve o'clock noon. The following extracts from the rules of the Congress will give an idea of the general character of the Society, and of the terms of membership:

"1. The object of the International Periodic Congress of Ophthalmology is to promote ophthalmological science, and to serve as a centre to those who cultivate it. It will entertain no discussion foreign to this object.

"2. The number of members is unlimited.

"3. Every member must be either a doctor of medicine, or of surgery, or of science, or possess some other equivalent degree, or be distinguished for his scientific knowledge.

"4. Candidates for admission into the Society shall be admitted on presentation of their diploma or of their scientific title, unless ten members demand a ballot.

"5. The sessions of the Society shall take place every fourth year, and be limited to ten days.

* * * * * *

"XI. The Society gives no diploma. Before the opening of each session a card available for admission to all the meetings, and signed by the President and Secretary, shall be given to each member on payment of his subscription (fixed at $2), and upon signature of his name on the register of those attending the meeting."

Cornelius R. Agnew.
Henry D. Noyes.
Daniel B. St. John Roosa.

Provisional Committee, appointed in London in 1872.

Weekly Bulletin of Medical Societies.

Monday, April 3.—N. Y. Neurological Society; Pathological Society of Brooklyn.

Tuesday, April 4.—N. Y. Obstetrical Society; N. Y. Dermatological Society.

Thursday, April 6.—N. Y. Academy of Medicine.

Friday, April 7.—N. Y. Medical Journal Association.

Original Communications.

ON THE TREATMENT OF ELEPHANTIASIS, WITH A TABLE OF FIFTY CASES.

By D. W. OSGOOD, M.D.,

SURGEON-IN-CHARGE OF FOOCHOW MEDICAL MISSIONARY HOSPITAL, FOOCHOW, CHINA.

Elephantiasis Arabum, Barbadoes leg, or maladie glandulaire, etc., are names given to various forms of skin diseases; but should be confined to that form of disease characterized by hypertrophy of the fibrous and intra-cutaneous tissues, and which, in a large majority of cases, is associated with enlarged lymphatic glands. Elephantiasis is comparatively common in the West Indies, in India, and in Southern China, while it occasionally occurs in Europe and the United States. The disease seems to show a partiality for the legs and scrotum. About three-fourths of the patients treated at Foochow have had the disease located in the legs, and the remaining fourth in the scrotum.

The usual history given by the patient is, "He had an ague fit or chill; and at that time, or a few days subsequently, he had enlargement of the part, accompanied by redness and pain, with swelling of the lymphatic glands." The ague may continue for months, or in exceptional cases there may be only one chill, at the time of the commencement of the attack.

Nearly all the patients have a sallow jaundiced look, are poorly nourished and come from malarious districts. In the early stages of the disease there is pain, swelling, and more or less of œdema. As the part enlarges, there is anæsthesia, and in some few cases ulceration. When the scrotum is involved, there may be constant pain, caused by the diseased mass dragging down and elongating the spermatic cords.

The size attained by these tumors varies from a few ozs., to one hundred and sixty lbs., the latter being the weight of a scrotum in the museum at Montpelier, preserved by Delpech. 3. A friend of the writer when in Formosa, saw a native whose scrotum extended to within six inches of the ground when he was standing erect. He utilized it by making it serve him as a chair, and it had the advantage of always being near at hand.

Passing to the treatment of elephantiasis, we may remark that internal medication avails nothing, except as the patient's general health is improved. With the latter object in view, quinine and iron may be advantageously administered in a large majority of cases. When the disease is recent, and located in the legs, we may hope for marked improvement, if not a complete cure. The leg should be carefully bandaged from the toes to the groin, and the patient confined to a horizontal position. Blisters should be applied over the enlarged glands in the femoral space; and it is a question worthy of careful consideration whether in some cases the enlarged glands ought not to be extirpated, thereby removing pressure from the deep veins and lymphatics. The bandaging should be continued until the leg regains its normal size, after which the patient should use a good elastic stocking when standing or walking.

With regard to the treatment of elephantiasis scroti we can speak with confidence, as over sixty cases have been operated on in China within the last fifteen years, and all have recovered, without a single exception. We know of no other capital operation which gives the same degree of relief to the patient, with as little risk, as that of amputation of the scrotum.

It may be asked, if the operation is as free from danger as represented, how is it that Liston and Key each lost his patient on the operating-table? And how is it that one of our best American authorities writes: *"If I had to deal with such a case, I should be tempted to cut away the mass piecemeal at several sittings, tying the vessels as they are divided, and using the actual cautery, to scar, if necessary, the raw surface. Or, instead of this, removal might be effected partly by the knife and partly by the écraseur."

We reply, that the principal danger to be apprehended is from excessive hemorrhage; and fortunately we have it in our power to arrest, or at least control it, by the use of Fayrer's tourniquet.

To show the necessity of some such appliance, we quote a few lines from the *American Journal of the Medical Sciences, No. CXXXIX.*, in which Prof. Neill records his experience in operating upon a case of elephantiasis. He writes: "Every incision was followed by free hemorrhage. There was great difficulty in securing the vessels, as they were dilated, tortuous and thin, and the structure in which they were imbedded was so dense that it was impossible to draw them out with the tenaculum. The veins were large sinews, and as the dissection progressed it became necessary to secure the bleeding orifices by needles and with ligatures. The operation was completed after four hours of most arduous labor." I am certain the danger or difficulty attending the operation, when performed without Fayrer's tourniquet, have not been overrated by the above-mentioned surgeons. The first case operated upon in the Missionary Hospital was for a scrotum measuring twenty-two inches in circumference, estimated weight twenty pounds. The operation required nearly two hours for its completion, and the hemorrhage was fearful, and we experienced the same difficulty in securing the bleeding vessels as Prof. Neill. In all our subsequent operations we have used Fayrer's tourniquet, and the hemorrhage has been trifling in amount.

Our usual method of operating may be conveniently described in connection with the history of case No. 5. The patient, aged thirty-four (34) years, presented himself for treatment with a scrotum measuring thirty-six inches in circumference. It had an unusually broad base, and came nearly to a level with the knees when the patient was standing. It was covered with verruncular growths, the largest of which were about the size of a pea, and together with the remains of an hypertrophied prepuce on its anterior surface, the growth presented all the usual appearances in such cases.

About an hour before the operation, the scrotum was elevated and compressed, so as to partially empty it of its venous blood. The patient being well under the influence of an anæsthetic, Fayrer's tourniquet† was applied about the neck of the tumor, and given in charge of two assistants, who were directed to make steady and firm traction. Two lateral flaps were dissected up, one from either side of the scrotum, the incision extending from the penis to within an inch of the anus. Next an incision was made through two inches of fibrous tissues, and one testicle dissected out from its abnormal covering; then the tissues anterior to and covering the penis were carefully divided upon

* Gross, vol. II., p. 803.

† The consists of a piece of whip-cord about five feet long. The ends are made fast to wooden handles; a small ring is slipped over a loop of the cord, so as to keep it in position.

No.	Surgeon in charge.	Age of patient.	Origin of the disease, whether connected with ague or not.	Duration of the disease.	Size of the tumor.	Condition of the testicles, spermatic cord, and tunica vaginalis.	Result of the operation.	General Remarks.
1	D. W. Osgood, M.D., Foochow, China.	30	Ague.	9 Yrs.	22 inches in circumference.	Hydrocele. Cords much elongated.	Recovery.	Operation protracted; hemorrhage excessive; the cords elongated; one testicle removed. Patient had a severe attack of erysipelas, but ultimately recovered.
2	"	64	"	.....	39 inch. in circum.	....	"	Owing to the advanced age of the patient, we declined operating. The prepuce was much enlarged with verrunucular excrescences.
3	"	39	"	.....	25 " " "	Healthy.	"	.....
4	"	54	"	.. ...	Weight, 13 lbs. 10 ozs. About 20 lbs.	... .	"	The origin of this tumor was from the integument over the linea alba, and the tendon of Obliquus externus. The genitals were healthy. The patient absconded before the time fixed for an operation.
5	"	34	"	10	25 lbs.	Hydrocele.	"	....
6	"	33	"	8	6 lbs.	"	"	....
7	"	25	"	2	About 2 lbs.	Double Hydrocele.	"	Only one artery required ligation.
8	"	35	"	5	5 lbs.	" " "	"	.....
9	"	33	.....	20	8½ "	Hydrocele. One testicle diseased.	"	One testicle removed, cord much elongated.
10	Dr. Beaumont, Foochow.	33	Ague.	.....	3 "	Hydrocele and Hernia.	"	....
11	John Kerr, M.D., Canton.	42	Not stated.	6	8 "	.....	"	....
12	"	53	"	6	12 "	.....	"	....
13	"	50	"	5	4½ "	....	"	... .
14	Drs. Miller and Manson, Amoy.	19	Ague.	5	7½ "	Healthy.	"	....
15	"	..	.....	.....	11½ "	One testicle diseased.	"	One testicle removed.
16	"	42	Ague.	19	7½ "	One testicle atrophied.	"	" " "
17	"	43	No Ague.	10	32 "	Hydrocele testicle atroph.	"	" " "
18	"	42	Ague.	9	9½ "	Hydrocele testicle dis.	"	.....
19	"	38	"	10	24 "	Normal.	"	....
20	"	49	"	12	3 "	"	"	There was Elephantiasis of the right leg.
21	"	38	"	12	51 "	"	"	....
22	"	42	"	6	21 "		"	With every attack of ague there was a rapid increase of the scrotal swelling.
23	"	25	"	5	10 "	"	"	.....
24	"	52	.....	7	13½ "	"	"	Complicated with urinary fistula.
25	"	46	Ague.	14	8 "	"	"	....
26	"	41	"	8	10 "	Hydrocele.	"	.....
27	"	34	A chill after exposure to cold.	10	31 "	Healthy.	"	....
28	"	26	Ague.	7	4 "	"	"	....
29	"	41	"	12	3 "	"	"	.....
30	"	45	"	9	14 "	"	"	....
31	"	25	"	12	31 "	"	"	.. ..
32	"	35	"	6	8 "	Hydrocele.	"	.....
33	"	26	.....	3	4 "	Single Hydrocele.	"	....
34	"	42	Ague.	12	6 "	Healthy.	"	.....
35	"	36	"	10	6 "	Double Hydrocele.	"	.....
36	"	32	"	12	8½ "	" "	"	.....
37	"	31	"	11	16 "	Single "	"	Absence of the right testicle and cord.
38	"	42	Not stated.	11	2½ "	Healthy.	"	....
39	"	38	Ague.	10	1 "	"	"	.....
40	"	50	"	..	30 "	Hydrocele.	"	Left testicle atrophied and excised.
41	"	16	.....	..	¼ "	Healthy.	"	....
42	"	43	Ague.	10	36 "	Double Hydrocele.	"	....
43	"	28	"	9	A few ozs.	.....	"	....
44	"	33	"	5	5 lbs.	Hydrocele.	"	... .
45	"	25	"	9	2 "	.....	"	....
46	"	..	Not stated.	.....	10 "	....	"	....
47	Dr. Gould, Swatow.	..	"	1	½ "	.....	"	.....
48	"	..	"	.....	10 "	.....	"	....
49	Dr. Galton, Foochow.	..	"	.....	Nearly 57 lbs.	.....	"	....
50	"	..	"	.....	Not given.	....	"	.....
51	Dr. Beaumont.	..	.....	.....	No Record.	....	"	Dr. Beaumont's library having been destroyed by fire, we are unable to obtain a complete history of Nos. 51, 52, and 53.
52								
53								

a director, until it was exposed to view. As the prepuce was diseased, it was entirely removed, and the penis dissected free from its surrounding adhesions; after which the remaining testicle was quickly found, and freed from the fibrous tissue in which it was imbedded. The genitals were given in charge of an assistant, who was directed to hold them well up out of the way, when the tourniquet was loosened and the tumor removed with a few strokes of the scalpel. An assistant, provided with a large sponge, was directed to make immediate pressure on the wound until the arteries could be ligated. In many instances torsion is quite sufficient to arrest the hemorrhage. The wound was dressed with carbolic acid solution, one part in forty, and afterward with a salve containing carbolic acid. It will be seen that the operation consists, I. In the elevation of the scrotum for an hour or more before the operation; II. The use of Fayrer's tourniquet. III. Dissecting up lateral flaps, which should not include any of the diseased skin; IV. Dissecting out the penis and testicles; V. Holding the genitals well out of the way, and removing the scrotum with a few well directed strokes of the scalpel; VI. Arresting the hemorrhage by pressing upon the wound and by ligating or twisting the arteries.

Should hydrocele exist, the sac should be opened with a free incision. In some cases the spermatic cords are much elongated, but they retract soon after the operation, and in a few days the testicles are drawn up close to the inguinal rings. The parts are usually covered with granulations in two or three weeks, after which time skin grafting may be advantageously resorted to. In conclusion, we append a table of fifty cases of elephantiasis scroti, which have been operated up in Southern China, all of which have recovered.

It will be seen by referring to the table that thirty-three of the patients had had ague. One had never had it, and in the remaining cases the record was defective in this respect. About one half of the patients have had hydrocele, and in connection with it the testicle has frequently been atrophied.

The average age of the patients has been thirty-eight, and the average duration of the disease eight and one-half years.

Case No. 4 we believe to be entirely unique. The tumor measured a foot in diameter and had its origin from the skin covering the linea alba and recti muscles. When the patient stood erect the tumor covered the genitals. As it gave him much inconvenience we decided to operate, but shortly before the appointed time the patient absconded, and we have heard nothing of him since.

Endocardial Vegetations in the Horse.—M. Trasbot, Professor in the Veterinary School of Alfort, presented to the *Académie de Médecin* recently, the heart of a colt aged eighteen months, which presented the following lesions; Chronic endocarditis with vegetations, and insufficience of the semilunar valves of the pulmonary artery; extensive dilatation, vegetation, and insufficience of the tricuspid valve.

M. Trasbot called attention to the following points in the history. When the colt was one year old, it was suddenly seized with marked lameness of the right leg, with red and painful swelling of the fetlock joint and pastern. This lameness lasted about three weeks, and was probably rheumatic in its nature. This was regarded as a new confirmation of the connection between rheumatism and diseases of the heart.—*Bulletin général de Thérapeutique*, February 29.

TWO CASES OF MUSCULAR RUPTURE IN WHICH MASSAGE WAS USED.

By DOUGLAS GRAHAM, M.D.,

of boston.

Case I.—Mr. J—— was a moderately corpulent, hale and hearty old gentleman, about seventy years of age. Nearly three years after rupturing the tendon of his left rectus femoris he called to see me, and I gathered from him the following history relative to his case: In getting off a horse-car, thinking it had stopped when it had not, he fell down, and as it was with difficulty he could stand when he got up, he was taken home in a carriage. The tissues above and around the left knee-joint were swollen and ecchymosed. As he bore with impatience the restraint of rest which his physician put him under, at the end of a week he attempted to walk, but falling down two or three times somewhat deterred him from further attempts at this means of locomotion. Immediately following this came a *merciful* (?) illness of gastric origin, which kept him in bed for a couple of weeks. At the end of this time the extravasation had been absorbed, leaving a depression above the patella, into which two fingers could almost be passed. Since then he had only been able to walk short distances, two or three squares or so, very awkwardly, and with his mind concentrated on the lame leg, for when he was off guard, which was quite frequently, he would fall.

About this time he consulted me, and after three applications of massage he walked from his house around the Common and Public Garden—about a mile and a half. The following week he had three more séances, when he again tried his pedestrian powers more than his business gave him any occasion to do, and this time extended his walk considerably beyond that of the previous week, "with greater ease and comfort," he said, "than he ever believed he would, and without scarcely thinking of the lame leg." After three more *massages* he went out of town to look at a country residence for the summer, and being seated in a rear car he thought they had not quite reached the depôt he wished to get out at. But when they started he discovered his mistake and pulled the bell-rope, got out when the cars stopped, and walked back to the depôt on the track, a distance of over a mile. The carriage he had engaged was, by that time, gone, and none could be got, for it was only a small country station. So off he started on foot and walked from and to the depôt, over a hilly country, in all about five or six miles, enough to tire almost any one, he thought, and yet the lame leg felt no worse than the other next day. He continued to have such good use of the limb without any more trouble for four months longer, when he was taken with a severe illness, which still keeps him prostrate.

The treatment was friction and kneading of the whole limb with the palm and fingers, varied with acto-passive or resisting movements of the foot, leg, and thigh in all their natural directions. While using the acto-passive motion it was interesting to observe from time to time the increasing strength and ease of movement which he was gaining. That such treatment often improves the nutrition and contractility and comfort of muscles, and consequently makes them more ready to obey the mandates of the will, or the automatic action of its subordinate centres, has been recognized from the most ancient times.

Case II.—Dr. Bull, of Worcester, has very kindly sent me his notes of the following case: Mrs. C., aged 45, a robust and muscular American lady, weighing 165 pounds, fell heavily on a slippery sidewalk, on March 13th, 1875. She did not bruise any particular part of her body, but made a violent effort to save herself, and was badly shaken. Her menses came on prematurely that day; * no other inconvenience was complained of, except a feeling as if she had taken cold in the neck. On the morrow there was decided pain in the neck and shoulder, which was not relieved by the usual household liniments, but grew steadily worse until I saw her on March 17th, four days after the fall. I found her carefully supporting the left elbow and hand, and inclining her head to the left side. When perfectly still, she felt only a dull ache; but the slightest movement of the head or arm caused her to cry out, with pain in the left shoulder, neck, and back of the head. The pain was distinctly cramp-like, and more severe than anything she had ever suffered, even in childbirth. The skin was not at all bruised, nor was there any signs of injury in the shoulder-joint. There was only great tenderness above the scapula, covering an area as large as one's hand. After half an hour's massage of the muscles of the neck and shoulder, the tenderness was found to be confined to a spot on the side of the neck, a couple of inches above the scapula, where the slightest pressure caused acute pain and spasmodic contraction of the anterior fibres of the trapezius, running up to the occiput two inches or so behind the ear. Light rubbing was soon tolerated over the spot, and the pain no longer radiated to the occiput and shoulder. Before leaving I was able to move the arm freely in all directions without causing pain, and the patient could move her arm and her head a little while my hand supported the trapezius, without the spasm coming on.

Diagnosis.—Rupture of anterior fibres of the trapezius, in the effort to save herself from falling.

The improvement continued, and the patient was tolerably comfortable lying on her right side. The spasm occurred occasionally in the night, and half a dozen times next day. There was thought to be a slight depression at the seat of pain, and a swelling behind it. On the 18th, after massage, the head could be raised and nodded, and moved to the right without spasm, but any attempt to move it to the left was followed by spasm, and was not persevered in. Massage was used by me for several days; voluntary motion of the trapezius was encouraged, and on the 31st of March all symptoms had disappeared. At present, August 4th, 1875, if the lady sweeps much or takes cold, she has some pain in the old spot, but rest soon relieves it. The doctor adds: "I have not given my notes in full, as they contain little else of interest; but I have said enough to show how a lady, not in the least nervous or hysterical, was relieved by *massage* of a very severe pain—restored to a healthy condition more speedily than could have been accomplished by any other therapeutic means."

Gently administered massage is soothing and hypnotic, hence its tolerance at the commencement of its use in this case. More forcibly applied, it is capable of producing an agreeable sort of anæsthesia,† so that by working at some distance from the painful spot, we can gradually approach it. The circulation at the same time being freely excited in the vessel and tissues near the cardiac side of the objective point, has a favorable revulsive effect. As soon as massage could be tolerated upon and about the seat of the injury, the effused products would be distributed over a greater area, their points of contact with the veins and lymphatic vessels increased, and, consequently, absorption—aided still further by the *vis-à-tergo* of the *massage* upon the returning circulation—could be carried on more rapidly; all of which, it seems to me, would be as likely to favor recovery in cases of this kind as in sprains.

These are the only two cases of the kind I know of. All the reading I can find about the matter is the following from Estradère, page 141: "In muscular rupture of small intensity, *le massage*, by favoring the resorption of effused liquids is one of the good therapeutic agents."

* A patient of mine, æt. 42, convalescing for a year from rheumatism, fell heavily on her nates, and the menses, which had been absent for three months, came on again.—(D. G.)

† A familiar example of this is the pinching up of the fold of skin between the thumb and forefinger, and working it for a minute or two before introducing the needle of the hypodermic syringe, which may then be done without the patient's even knowing the moment at which it penetrated the skin.

A CASE OF DISLOCATION OF THE RIGHT FEMUR ON THE PUBES.

By ERSKINE MASON, M.D.,

PROFESSOR OF CLINICAL SURGERY, MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK; SURGEON TO THE BELLEVUE AND ROOSEVELT HOSPITALS.

P. C., a strong muscular man, aged 55, was brought into my wards at Bellevue Hospital, Dec. 31, 1875, and gave the following history. On the evening previous to admission, while leaning against a railing which enclosed an area, in some manner, unknown to himself, he fell over the railing into the area, a distance of nine or ten feet. He was insensible when picked up (which was immediately after he fell); but on returning to consciousness he found he was unable to stand, and that there was great immobility of the right limb.

As the patient lay in bed the limbs were parallel, the right foot was strongly everted and fixed. He was unable to move the limb of his own accord beyond drawing up his knee to a slight extent. A globular prominence, which was evidently the head of the femur, was observed in the groin pushing upwards Poupart's ligament. By measurement, the head of the bone was found one inch from the anterior superior spinous process of the ilium, the femoral artery was pushed inwards and upwards, rendering its pulsations very apparent. He preferred to cross the sound limb over the injured one, as in this position he said he felt easier. The great trochanter was situated half an inch below and behind the anterior superior spinous process, and there was a marked depression in the normal situation of the trochanter. As he lay in bed, he could abduct the limb only to a slight degree. Two inches below the tuberosity of the right tibia was a recent abrasion of the skin. Upon making careful measurements of the limb from the anterior superior spinous process of the ilium to the end of the inner malleolus, I was surprised to find that the shortening was but a quarter of an inch. In order to be correct in these measurements I went over them several times, and they were all confirmed by Drs. Frank H. Hamilton and James R. Wood. Upon placing him in the erect position, he stood with the foot strongly everted, the heel slightly raised from the ground and resting just behind the inner malleolus of the sound limb, the knee a little flexed and thrown outwards. We could not bring the limb backwards or forwards, and could only abduct it slightly.

Patient being placed upon the floor and etherized, I proceeded to its reduction by manipulation. Present —Drs. Hamilton, Wood, the members of the house staff, and my class of students. The various manipulations that were resorted to are given in the order in which they were used.

First attempt. I slightly flexed the thigh, then made extension and rotated outwards, Dr. Hamilton at this period of the manipulation drawing upon the upper portion of the thigh by means of a jack towel in an outward and upward direction, while I brought the limb down to the floor. This attempt failed.

Second attempt. Flexing the thigh at a right angle to the pelvis and rotating outwards. This failed.

Third attempt. Flexion to same degree as before, and rotating inwards and bringing the thigh across the middle third of opposite thigh, pressing the knee down, at the same time making extension and bringing the limb down by the side of the other. Failed. During this manœuvre I felt the head of the bone slip, but upon examination it apparently had not changed its position.

Fourth attempt. Flexion to same degree as in the other two attempts, and making strong extension. Extension being made by a jack towel passing under the knee of the patient and over my shoulders, the pelvis of the patient being held down by means of a folded sheet passing over his pelvis and under the feet of two assistants, who stood on either side of the patient, the ends of the sheet being held securely in their hands (this device, which was suggested by Dr. Hamilton, answered admirably in holding the pelvis steadily to the floor). This attempt also failed.

Fifth attempt. Patient was turned upon his left side, and counter-extension made by means of a jack towel passing over the perineum, and held by assistants. I then, with the assistance of Dr. Wallace of the house staff, made extension from the leg and thigh, and after a moment or two of extension I pressed the thigh a little backwards behind the other, and the head of the bone glided into the acetabulum.

Patient was then placed in bed, where he remained for some two or three weeks, and left the hospital Jan. 25, 1876. He could walk without crutches, but preferred, he said, to rely on them a little longer.

I have regarded this case of sufficient interest for publication for several reasons: First, the position of the limb did not correspond to the usual description of this rare form of dislocation given in our text-books. There was not the marked abduction of the limb that is usually ascribed to this dislocation; on the contrary, the limbs were parallel, and it was with difficulty that any degree of abduction could be produced. With reference to the amount of shortening, it was less in this case than I should have expected or regarded before very careful measurements had been taken, and this point was particularly noticed by those who had the opportunity of examining the case.

With reference to the method which should be employed in the reduction of this form of hip dislocation, there would appear to be no fixed plan of procedure. Indeed, if we examine, as we have done, reported cases of this dislocation, we find that the methods that have been adopted and proved successful have been various. We are told, it is true, by Bigelow, that reduction may be effected in a variety of ways; and he describes, in his most excellent work on Dislocations of the Hip, no less than five or six methods of manipulation; though, as he states in his book, he has never met with this dislocation, we have no means of knowing which would be the most effectual. As far as we are aware, the only two dislocations of this kind that have been reduced by precisely the same manipulations are those occurring in the practice of Dr. Fountain, of Iowa, and reported in Hamilton's work on Fractures and Dislocations. Though in one of our attempts we employed almost the same kind of manipulation as did Dr. Fountain, we were unsuccessful; as were also other methods, which in other cases had proved successful.

From our study of this dislocation upon the cadaver, it would appear that this luxation should readily be reduced by flexion of the thigh, nearly if not quite to a right angle, then rotating the head of the bone inwards or outwards, and gently rocking the same towards the acetabulum, while we bring the thigh down parallel with the other. Experience, however, with these dislocations in the living subject, proves this not to be the case, and it seems probable that but few of these cases will be reduced by precisely the same mode of procedure.

In this connection I should like to place upon record an observation I made upon the cadaver while illustrating the several dislocations of the hip, and modes of reduction by manipulation before the medical class of the University last winter. It is well known to surgeons, that in the reduction of dorsal dislocations, either by the pulleys or manual manipulations alone, that the head of the bone, instead of at once passing into the acetabulum, will often fall into the thyroid foramen, and this may occur several times before its reduction is effected. We found that when the obturator internus was intact, this accident did not occur; but upon rupturing or cutting this muscle, without the greatest care on our part this mishap would occur; and, indeed, on two occasions, in spite of all our care, the bone slipped into the thyroid foramen. These experiments were done on a cadaver, where all the soft parts were removed with the exception of the obturator internus muscle and the ilio-femoral and capsular ligament proper.

113 West 44th Street, *March* 21, 1876.

THE TREATMENT OF FRACTURE OF THE NOSE.

By PHILIP A. BISSELL, M.D.,

MAHANOY CITY, PA.

The Medical Record (N. Y.), Vol. 10, No. 17, Nov. 20, 1875, contains an article upon the treatment of fracture of the nose, by means of a cog-wheel apparatus. I will give a history of three (3) cases, which I have treated within the last year, two of which presented the same appearance, the exceptional one which was the second of the three cases which I was called upon to treat, differed from the other two in there being an incised wound through the soft parts at the junction of the vomer with the nasal cartilage. My *modus operandi* is the same as that which is described by Mr. Adams, bringing the parts *in situ* with the aid of the forceps. To hold them in coaptation I simply use sponge tents, withdrawing the old and replacing new ones daily according to the indications of the case. I have not experienced any difficulty from the sensitiveness of its lining membrane or otherwise, in introducing the above-mentioned support into the upper part of the nasal cavity. I select tents which will expand to about the capacity of the nostril. I have not found any need whatever for a steel compressor, or any other instrument with the exception of a strong pair of for-

ceps, to assist me in replacing the fractured portions of bone, etc.

The following is a *resumé* of the cases: Case 1. The fracture was produced by being struck with an iron bar across the upper portion of the nose at the junction of the nasal with the frontal bone, causing a longitudinal fracture of the ossa nasi extending to the inner canthus of the eye upon the right side, breaking the left side into small fragments, and separating the cartilage from the vomer, etc.

Case 2. The patient was struck with the handle of a hoisting machine, causing nearly the same fracture, with the exception of an incised wound at the junction of the vomer with the nasal cartilage, nearly separating that portion of the nose from the face, which had to be held in place by sutures.

Case 3. Patient was struck with a lump of coal which completely flattened the nose upon the face and produced an injury to the supra-orbital arch on the right. All three (3) of these cases were treated with the sponge tents, none of them presenting any deformity excepting from the cicatrices on the soft parts.

I cannot see what advantage the cog-wheel apparatus has over the sponge tents, yet I can see how hollow plugs can and would suggest hard rubber tubes, which could be made compressible by hot water, made conical (if practicable) and introduced into the nasal cavity. They would be better than tents, as they could be left any length of time without removal.

Progress of Medical Science.

Salicylic Acid in the Treatment of Acute Articular Rheumatism.—Salicylic acid, since its introduction into the materia medica, has been very extensively employed as an antiseptic and febrifuge. Its exact value in both of these offices is still apparently *sub judice*. Within a few months, surprising results have been claimed for it in the treatment of acute articular rheumatism, and we give below a summary of the results attained by several recent German observers. Thus Dr. Stricker, from its use in Prof. Traube's wards, declares that it has been found on trial to be a remedy capable of definitely curing recent cases of rheumatic affection of the joints in an exceedingly short time. He does not claim for it the power of absorbing exudations which have already taken place in the joints; in the acute stage he finds improvement is coincident with the fall of the temperature. He considers it harmless, if given in doses of from 7 to 15 grains an hour. While these are safe doses for young and vigorous persons, they may, in those who are advanced or weakly, produce some excitement, with ringing in the ears, deafness and sweating. To prevent relapses, he advises that the acid should be continued in diminishing doses for some days after the chief symptoms are subdued. The acid is of very doubtful utility in chronic rheumatism, and that associated with gonorrhœa and dysentery. Dr. S. uses the pure acid in a pulverized or finely crystallized form.

Dr. Hildebrandt, in the *Deutsche Med. Wochenschr*, No. 7, 1876, gives the details of a case of acute rheumatism, occurring in a girl of eleven, to whom he gave the salicylic acid in doses of 3¾ grains hourly, with the result of complete relief of the symptoms at the end of thirty six hours. It was continued in doses of 1½ grains for some days longer.

At the end of a short article on the various uses of salicylic acid, in which its use in diphtheria occupies most attention, Dr. Robert Buch, from his own experience in a number of cases, confirms the favorable views of Stricker regarding its use in acute rheumatism. With him, too, it has proved unsatisfactory in the chronic form. He prefers to give it, as recommended by Hanow, in solution with phosphate of soda; and not, according to the plan of Schulz, suspended in mucilage.

L. Riess, of Berlin, is inclined to speak more guardedly than Stricker of the action of the acid in rheumatism. Thus he recommends it as a valuable antiseptic in this disease, and says that in many cases, especially when coming early under treatment, a great amelioration of the symptoms is coincident with the defloreseence. From his figures, however, it would appear that the duration of treatment in a majority of cases is not very short. His own plan was to give the remedy in large single doses, combined with soda, as often as the temperature reached 102.2° F., but he afterwards adopted Stricker's so far as to give 15-grain doses hourly; using as before, however, the solution with phosphate of soda, and not the pure crystals. Still his results were much less favorable than Stricker's. He has more recently used the commercial salicylate of soda.

Dr. Julius Steinitz, of Breslau, gives details of three cases, in which he gave to two adults doses of 7½ grains hourly of the pure acid, and to a child of six and a half years 3 grains at the like intervals. The two former were practically free from pain and fever after nineteen and twenty doses respectively, although the second one had been complicated with very violent delirium. The child required but sixteen doses. Dr. Steinitz, too, has found it entirely valueless in chronic rheumatism.—*Berl. Klin. Woch., Feb.* 21, 1876—*Allg. Med. Cent.-Zeit. Feb.* 23, 26, *Mar.* 1 *and* 4, 1876.

The Circulatory Disturbances visible to the Ophthalmoscope in Traumatic Lesions of the Brain.—M. Panas concluded a memoir on this subject, read before the *Academie de Médecin*, with the following resumé of facts, that were established by his observations:

1. Papillary stasis often occurs as a result of the different traumatic lesions of the encephalon (concussion, contusion, wounds, fractures of the cranium, &c.)

2. This stasis in question is not always accompanied by visual disturbances; consequently the ophthalmoscope should be employed in all cases of injury to the head, whether a diminution in the acuity of vision be complained of or not.

3. According to the autopsies made, and according to Schwalbe, this stasis seems to depend on an infiltration of blood or of serum into the sheath of the optic nerve, and is not directly due to the cerebral lesion.

4. The papillary stasis cannot be said to belong to one variety of cerebral lesion rather than to another, nor does it afford us any assistance in judging of the gravity of the lesion.

5. All that can be affirmed in the present state of our knowledge, is that the papillary stasis indicates the presence of an effusion into the meninges.—*La France Médicale*, February 26th, 1876.

Numeration of the Globules in the Newborn.—M. Lépine reported to the *Société de Biologie*, at the meeting of the 12th of February, the results furnished by counting the globules in the new-born. In his experiments, he used the instruments of M.

Hayem, and took the blood from a finger or the great toe. He proved that there is a considerable augmentation of the globules on the day after the birth of the child, but on the second day a progressive diminution in their number begins, and continues for a certain time. In one case M. Lépine found alternating augumentation and diminution, where there was an unhealthy condition of the subject. This diminution of the globules, which begins on the second day and is finished on the eighth day after birth, is in inverse relation to the changes in the weight of the child. On the day after birth there is diminution in weight, due to loss of meconium and increase of the globules. From the second day the weight goes on increasing, while on the other hand the globules diminish. It is important to note that, in pathological conditions, an augmentation of the globules corresponds always with a decrease in weight, while at the same time a diminution in the globules is attended by increase of weight. —*Le Mouvement Médical*, February 19, 1876.

Infantile Paralysis in an Adult.—M. Couty presented to the *Société de Biologie*, on February 26th, a patient aged 28 years, suffering from acute myelitis of the anterior horns (infantile paralysis). The paralysis, a hemiplegia complete in the lower, incomplete in the upper extremity on the left side, appeared suddenly after a fever of four days' duration, without disturbance of sensation or nutrition, or cerebral symptoms. Atrophy of the muscles was appreciable in September, a month after the commencement of the trouble; at present the upper extremity is one to three centimetres, the lower extremities three to eight centimetres, less in circumference on the left than on the right side. The paralysis began to diminish a month and a half after its first appearance, and at the present time all the movements of the limbs can be performed, but their force is diminished, and some of them are very limited. The muscles on the posterior aspect of the leg and thigh contract but very slightly on the application of the faradic current.

There is moreover, a marked hyperæsthesia of the paralyzed muscles, a diminution of one to four degrees in the temperature of the atrophied parts, and finally some very curious disturbances due to vaso-motor paralysis.—*Le Mouvement Médical*, March 4, 1876.

The Ferment of Urea.—M. Museulus has described a new test-paper, by means of which urea in solution can be recognized even when present in very small quantity. He obtained it by filtering ammoniacal urine, washing the filtrate with distilled water, and coloring it with turmeric. This paper contains a small quantity of the ferment in its pores, where it may be preserved for a very long time. When the paper is dipped in a solution of urea, and then exposed to the air, it becomes brown in a few minutes. This change of color is due to the action of the ferment, which metamorphoses the urea, a neutral body, into carbonate of ammonia, without action on the turmeric paper.

Every specimen of urine does not furnish this ferment; some specimens can even be exposed to the air for months in summer without undergoing alkaline fermentation. The thick glutinous ammoniacal urine passed by patients suffering from catarrh of the bladder, is the richest in this ferment. Such urine cannot be filtered, because the mucus in a short time forms an impermeable coating, which stops up all the pores of the paper. If strong alcohol be added to it, however, the mucus coagulates into a mass resembling fibrine, which can be easily isolated from the fluid. This mucus is itself the ferment. In order to preserve it, it must be dried by a gentle heat, pulverised, and placed in a tightly corked bottle. This urea ferment possesses none of the properties that characterise the organised ferments, but has, on the contrary, a great resemblance to the soluble ferments, such as the diastase, the saliva, and the pancreatic juice; in fact, according to M. Bouchardat, acids and alkalies hinder the action of the diastase, while alcohol, ether, and creosote exert no influence over it. The same is true of the urea ferment. Carbolic acid is the only acid that exerts no action on this ferment. —*Bulletin général de Thérapeutique*, February 29.

Acute Glanders.—Dr. John Reddy gives the history of a case of this disease, which came under his observation. The patient, a stout, well-built man, had travelled for three days on a steamer where there were fourteen horses, ten of which were sick, the symptoms being debility and a foul discharge from the nose. He was obliged to take care of them himself. Two of the horses died and were thrown overboard, and on two occasions he was made to vomit by the stench on first going to the horses' quarters in the morning. Four days after leaving the steamer he felt unwell, experiencing peculiar sensations about his limbs and body, not of a painful character, but producing a kind of uneasiness. These continued for four days, when he was seized with a severe rigor, high fever, and profuse sweating. This condition lasted for five days, when a globular swelling, about the size of a goose-egg, was noticed under the right clavicle, extending down to the margin of the third intercostal space. This had arisen the night before, and was exceedingly painful and tender to the touch. Tincture of iodine was painted over it, and warm linseed-meal poultices were applied. The next day the painful swelling of the chest was found to be relieved by the poultices and iodine paint, but there was pain throughout his body and along his arms and legs. Three days after, a new feature presented itself: Along both arms, and from the shoulders to the wrists, and from the hips to the ankles, and in the calves of the legs, about one inch apart, hard, well-defined swellings were felt, projecting somewhat from the skin, and about the size of very small filberts. They were very painful to the touch; and here and there small, dusky, dry, erythematous patches were seen. Along the supra-scapular region there was another globular swelling, a little larger than that which existed on the chest, and equally painful. For this, the same treatment was ordered. The following day the debility was marked, and the perspiration profuse. A tumor, similar to the one mentioned over the scapula, appeared, occupying the crown of the head and a portion of the right parietal bone. Pink streaks along the line of the lymphatics, passing between or along the line of the hard, knotty tumors, were also observed. The patient was languid, and complained of great prostration. On the seventeenth day of the disease, a number of vesicles appeared on the arms and shoulders, which, in the course of a few hours, became pustular. They were not unlike small-pox pustules, and made their appearance in crops. On the 19th day the pulse was 120, and the temperature 103½. There was great prostration, with a short cough and oppressed breathing, and on the twentieth day the patient died. After reading Bollinger's exhaustive article on the subject, in Ziemssen's Cyclopædia, in vol. III., on Chronic Infectious Diseases, and other articles of a similar kind, Dr. Reddy says he could not fail to recognize the great

similarity between them and the case brought under notice.—*Canada Medical and Surgical Journal*, March, 1876.

Morphœa.—At a meeting of the Chemical Society of London, Dr. Dyce Duckworth exhibited an example of this disease, giving the following history of the case: The patient, a male, 26 years of age, had been under observation for four years. The change dated from an attack of headache, when he had observed an alteration in the color and texture of the skin on the left side of the forehead. When first seen, there was a smooth, shiny, slightly depressed patch, which could not be pinched up above the left eyebrow, and it extended upwards over the forehead; the patch also involved the scalp, the hairs of which had fallen out. The surface was dry, no perspiration occurring when other parts of the face perspired, and the sensation was blunted over it, but not lost. The patch slowly grew, a year later was still increasing. About one year after, it was still larger, reaching to the inner edge of the eyebrow, and approaching more nearly the vertex. It was of a dark, raw sienna color, with vascularity here and there, and it was raised above the surrounding surface. Subsequently, the patch became more depressed, especially at the margins, and the color faded, only slight pigmentation remaining here and there, and it became warmer and more vascular than the surrounding skin. It was a curious fact that the disease was confined to the left side in all the six cases that had been recorded in English literature, this being the seventh. Dr. Hilton Fagge agreed with Dr. Duckworth, in the after discussion, that a disease so distinctly localized to the region of one nerve, namely the fifth, should have a distinct name. As to the pathology of the affection, he did not know whether it was due to a definite fibroid growth in the skin, as in the case of ordinary diffused scleroderma; if so, it would be an example of what was at present a doubtful occurrence—namely, the atrophy and absorption in course of time of a true fibroid tissue, as distinguished from a small-celled growth.—*The Lancet*, *March* 4, 1876.

Nervous Aphonia Cured by Inhalation of Chloroform.—Dr. de Ridder, of Liège, reports a case in which these inhalations produced the happiest results. The patient, a woman of twenty-eight years of age, of a good constitution, became aphonic while suffering from an ordinary cold. This aphonia resisted all the remedies employed, after the disappearance of the inflammatory symptoms. As the patient was hysterical, M. de Ridder, thinking that the aphonia was nervous, employed without success, assafœtida pills, and then a narcotico-anti-spasmodic mixture. Finally he made her inhale the vapor of chloroform for one or two minutes every hour, in such a manner as not to produce anæsthesia, but just enough to produce a little giddiness or stupefaction. The aphonia yielded little by little, and at the end of two days had completely disappeared. Five months afterwards, chloroform was again employed with like success for a recurrence of the attack. Finally, a year later, the same aphonia, accompanied by a spasmodic hiccough and incessant vomiting of a glairy matter, showed itself after a violent attack of hysteria. The employment of chloroform, administered in the same way, again succeeded as well as before. The hiccough and the vomiting yielded on the employment of ether.—*Journal de Méd. et de Chir.*, February, 1876.

The Action of Cold on Milk and its Products.—When cow's milk, fresh from the udder, is exposed to different temperatures between 0° and + 63°, and kept at the same temperature for twenty-four or thirty hours, the following results are obtained:

1st. The rising of the cream is more rapid, the nearer the temperature at which the milk has been kept approaches zero.

2d. The amount of cream obtained is greater, when the milk has been exposed to a low temperature.

3d. The yield of butter is also more considerable in this case.

4th. Finally, the skim milk, the butter, and the cheese are of a better quality when the milk has been kept cool.

MM. Tisseraud and Boussingault think that the low temperature arrests the evolution of the living organisms that constitute the ferments, and prevents production of the fermentation due to their action.

In some northern countries the milk is kept at a temperature of 8° to 6°, by means of large basins filled with spring water or even with ice.—*Bulletin général de Thérap.*, February 29, 1876.

Ergot in the Treatment of Galactorrhœa and Mastitis.—Dr. Schtscherbinenkoff observed during an epidemic of raphania that, associated with the symptoms of ergotism, the secretion of milk in nursing women was often diminished or arrested. Recognizing the fact that an accumulation of milk in the ducts is the great cause of parenchymatous mastitis, he prescribed the ergot of rye for two women, who in former confinements had suffered from this trouble, giving it as soon as there was swelling of the glands. The results were most favorable. In so-called milk fever he also gave ergot, combined with quinine, in doses of grs. v.–x. of each three times a day. He also found it useful in arresting the secretion of milk after weaning the child. He gave as much as a drachm daily for a week without unfavorable results. —*Sitzungsberichte d. Ges. russ. Aerzte in Moskau*, 1874. —*Allg. Med. Cent. Zeit.*, May 19, 1875.

Preservation of Meat by the Constant Electrical Current.—Bloch reports that a piece of meat, through which a constant current was allowed to flow, remained unchanged in color and smell after six days' exposure to atmospheric influences; while another piece similarly exposed, but without the electrical current, had become putrid at the end of the six days. He promises to publish further experiments.—*Centralbl. f. d. med. Wissenschaften*, Jan. 22, 1876.

Camphorated Ether in Erysipelas.—According to Cavazzani, a preparation consisting of camphor and tannin, of each one part, and ether eight parts, is an excellent application, even in cases of phlegmonous erysipelas. It is also very efficacious in burns of the first and second degrees; the heat disappears rapidly, and blisters do not form. It should be applied every three hours.

The Dead among the Poor.—The London *Lancet* calls attention to the inconveniences attending post-mortem examinations among the poor. In many instances a whole family occupies but one room. The editor suggests the propriety of establishing mortuary houses in the crowded districts, where not only autopsies can be performed, but where burial can be awaited with decency.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, April 8, 1876.

PRELIMINARY EDUCATION.

If we look over the catalogues of our different medical colleges we shall find that not one-third of the students have received a baccalaureate degree. Judging from the standard of preliminary education adopted in other countries, not one-third of our young men who commence the study of medicine and attend medical lectures are properly qualified to do so. Every one knows that the reason for this is, that the medical schools take any one who may choose to apply, and who is able to pay the fees. It would be so much against their interests to do differently that we can hardly expect them to change their course by insisting upon some method of preliminary examination which would insure a higher grade of intellectual acquirements among the matriculants. Far from doing this, we have seen how much of a disposition there is to trifle with some of the dearer interests of the profession, in crowding upon us graduates who are wholly unfitted for the responsible duty of practitioners, and who have been allowed to evade, not only the letter but the spirit of the law, by being credited with two courses of lectures in one year, and thus actually shortening the term of study. There has been, it is true, a great deal of talk on the part of the medical teachers in regard to the necessities of reform; but, with one or two exceptions in the case of medical colleges, nothing has been done to effect it. Practically speaking, it has amounted to nothing but high-sounding emptiness of promise to drown the clamor against what they know to be their purely selfish interests.

It has long been evident that any change for the better must be made by the profession itself, independent of the colleges. An attempt to effect a very desirable departure from the system of allowing every one to enter a medical college without a sufficient preparation for the study of medicine was made by the American Medical Association in 1871. That body, at the instance of its Committee on Medical Education, passed the following:

"That each State and local Medical Society be requested to provide, as a permanent part of its organization, a Board of Censors, for determining the educational qualifications of such young men as propose to commence the study of medicine, and that no member of such society be permitted to receive such a student into his office until such student presents a certificate of proper preliminary education from the Censors appointed for that purpose, or a degree from some literary college of known good standing."

This resolution was adopted by the Medical Society of this State the subsequent year, and another supplementary one adopted, to the following effect:

"That no member of any medical organization represented in this Society be permitted to receive a student into his office until such student presents a certificate of a Board of Censors, showing his qualifications to enter upon the study of medicine."

Theoretically speaking, these provisions would seem to remedy a very important defect in medical education, but, practically, they became a dead letter. The American Medical Association was seemingly powerless to enforce its regulation, and the State Society, through its county organizations, ignored its self-imposed obligations. There were, however, two exceptions to the rule, in the case of the Medical Societies of Erie, and of Ulster, in this State. Both of these organizations deserve the credit of living up to the principle involved in the resolutions named. The Erie County Medical Society particularly has distinguished itself by a determination to do its duty in this respect, in proof of which we quote the following extract from the Examining Board, made at its last annual meeting:

"Since 1872 a continuous and systematic effort has been made by this Society, to enforce the provisions of its by-laws in relation to preliminary education, as recommended by the State and National Medical Societies. This effort was begun by the Primary Board issuing a circular to all the members this Society, calling attention to the recommendations of the American Medical Association, and our State Medical Society, together with such parts of our own by-laws as relate to preliminary education, and asking for the support and co-operation of all.

"It is not necessary to enter into a detail of all the official acts of this board since 1872; you are fully acquainted with the results of our efforts. These results have been by no means commensurate with the importance of the cause in which we have labored, but have been sufficient to demonstrate to us the entire practicability of this part of reform in medical education, and to afford abundant encouragement to continue our efforts in this direction."

Having done this much, the Society appeals to its sister organizations throughout the State for co-operation, and asks the president of the State Society to bring the matter before that body, and to urge organized efforts in the same work throughout the State. By all means let its example be followed. If such a thing is accomplished, we can at least control to a cre-

tain extent the entrance of unqualified men into the colleges; at least the profession can prove that it is in earnest regarding the work of reform, and can be enabled to hold the medical schools to a stricter responsibility in regard to the qualifications of their matriculants.

INTERNATIONAL CONGRESS OF OTOLOGY.

The American Otological Society has issued a call for an International Congress of Otologists, to be held in New York, on Friday, Sept. 15, at Chickering Hall, the day after the adjournment of the Ophthalmological Congress. Many of the American, and some of the foreign, Ophthalmologists are also Otologists; therefore it is believed that the sessions of this Congress, which are for one day, will be well attended. Delegates from France and Great Britain have already promised their presence.

Reviews and Notices of Books.

Extra-Uterine Pregnancy: Its Causes, Species, Pathological Anatomy, Clinical History, Diagnosis, Prognosis and Treatment. By John S. Parry, M.D., Obstetrician to the Philadelphia Hospital; Physician to the Department for the Diseases of Women in the Presbyterian Hospital; Vice-President of the Obstetrical Society of Philadelphia, etc., etc. 8vo, pp., 272. Philadelphia: Henry C. Lea. 1876.

This obscure branch of midwifery has recently attracted unusual attention in various medical journals, and has been brought prominently before many of the Obstetrical Societies for discussion; but the profession has long felt the need of some special treatise, presenting a full historical record of cases, describing their pathological anatomy, and discussing the various and most approved methods of treatment.

Dr. Parry has fully satisfied this want in the book before us. The work is based upon the analysis of 500 cases of extra-uterine gestation, collected and arranged so that the views of various observers may be readily compared.

Of these cases Dr. Parry has made a most critical and searching examination, closely discriminating between statements based upon conjecture and speculation merely, and facts deduced from large clinical experience.

While the various parts of the treatise contain many original and valuable suggestions, the sections on pathology and treatment are especially excellent, and show an extraordinary amount of research and care. The tabular presentation of the subject of gastrotomy leads to important practical conclusions.

The book will doubtless have an extensive circulation, and will greatly aid the student of this recondite department of medical science.

Dr. H. Lenox Hodge's Note Book for Cases of Ovarian Tumors, and other Abdominal Enlargements. Philadelphia, Lindsay & Blakiston: 1875. Pamphlet, p. 35.

In the preparation of this little book, modelled as it is in the main upon that first suggested by Spencer Wells, nothing appears to have been omitted which could contribute to thoroughness and accuracy of diagnosis, or to a systematic record of the history and progress of a case. No one could devise anything better for the record of his first cases; but as they accumulate, everyone, probably, would introduce changes in the plan to suit his own ideas of classification. A page on which post-mortem appearances may be noted appears to be a desideratum, unless, indeed, one can be so sanguine or so charitable as to believe that the skill of ovariotomists has now become so great that an autopsy never enters into their calculations.

The Physician's Visiting List for 1876. Thirty-fifth year of its publication. Philadelphia: Lindsay & Blakiston.

It still continues to be an agreeable and valuable pocket companion for the medical practitioner.

Reports of Societies.

OBSTETRIC SECTION.

NEW YORK ACADEMY OF MEDICINE.

Prof. Isaac E. Taylor, Chairman.

A stated meeting was held at the residence of the Chairman, March 20th, 1876.

Prof. Taylor with brief and appropriate remarks welcomed his guests, thanked the members for their suffrages in making him their presiding officer, and pointed out what should be accomplished by the section. The regular order for the evening being

PHANTOM TUMORS.

Dr. Chadsey referred to a condition which he had met in a woman, 40 years of age, who had never borne children. The lower part of the abdomen was distended by a hard tumor that pressed upon the bladder to such an extent as to render catheterization necessary. The bladder being emptied, an active cathartic and emetic were administered, the catamenia appeared, not very profusely, and the uterine tumor was reduced to its natural size. The enlargement had been felt by the woman for some time, but with the return of the menstrual flow had entirely disappeared. Inquiry: Was it congestion of the uterus, or something else?

Dr. Worster remarked that he had seen cases in which venous congestion depending upon flexions had been developed to such an extent as to give rise to a condition closely resembling what is commonly understood by the word tumor; but which had entirely disappeared when the neck of the uterus had been straightened and a certain amount of local dissection made. He referred to one case in which the pelvis was filled with a uterus that was enlarged in consequence of arrested return circulation dependent upon flexion. The flexion removed, the parts were restored to their normal size.

Dr. Downs referred to a case which he thought might be classed under the head of

UNUSUAL UTERINE HEMORRHAGE.

He was called to visit an unmarried German girl, æt 28 years, and found her pale and almost pulseless, on account of loss of blood from the uterus. A piece of ice, as large as could be used, was at once introduced

into the vagina and carried up to the cervix. The os was open to about half the size of the index finger, a trifle soft about the edges, and situated to the left side of the pelvis. The body of the uterus could be easily recognized lying to the right side of the pelvis, and when pressed upon gave a sensation to the finger as though it contained fluid. A bandage was adjusted to retain the ice in position, and drachm doses of equal parts of fluid extract of ergot and paregoric were administered every half hour until the flow ceased.

The blood which was lost clotted quickly, was of a bright red color, and was something more than three quarts by measure. It was closely examined, but no evidences were found which led the doctor to believe that the flow depended upon a miscarriage.

The woman had not had her courses as freely for three or four months as usual, otherwise they had been regular.

At the end of two weeks, the doctor was not able to make anything more of the case, and came to regard it as one of uterine congestion, which relieved itself suddenly in the way of this profuse flow.

ANTISEPTIC TREATMENT OF DIPHTHERIA.

Dr. Post referred to a patient whom he was called to visit in the morning, a boy 3 years of age, who had very considerably swollen tonsils, with diphtheritic patches upon them; considerable mucous discharge from the nasal cavities; and glandular enlargement with tenderness at the angle of the jaw. The doctor at once prescribed bromine with bromide of potassium, after the following formula:

℞ Potass. Bromid. ʒ i.
Aquæ ʒ i. M.

Dissolve in the solution of bromide of potassium, twenty minims of bromine.

Of this mixture administer gtts. x in a teaspoonful of water every hour.

The nasal cavities were hourly washed with a solution of common salt in water, a teaspoonful of salt to the pint of water; and one grain of sulphate of quinine given in solution every two hours. To these were added a tablespoonful of milk-punch every hour.

In the evening the patient was found breathing with much greater ease than in the morning, and was sitting up in bed.

This single case simply showed something for the disinfectant plan of treatment.

Dr. Post also referred to another boy, æt. 9 years, who had the disease much worse than the boy just alluded to, and the solution of bromine with bromide of potash was applied by means of a swab, because the patient made no resistance, as was the case in the other patient. In other respects, the treatment was the same. In the latter case also there was marked improvement at the second visit; and at the end of four or five days the patches of diphtheritic exudation had all disappeared and the patient was fairly convalescent.

Three weeks subsequently, the boy had double vision, which was treated by the use of strychnine in 1-60 gr. doses thrice daily, and complete recovery followed.

There was another child of the family at that time, and he was removed from the house. He, however, was attacked with diphtheria a few days afterwards; and, apparently, was no worse than the boy who was, under Dr. Post's care, but the case proved fatal.

Dr. Downs inquired whether the dose of milk-punch given to a boy three years of age was not rather large?

Dr. Worster remarked, that he regarded stimulants as the sheet-anchor in the treatment of diphtheria.

Dr. Post further remarked, that he believed it a fair inference, that whatever benefit was derived from disinfectant remedies, came rather by using them at short intervals and in doses of corresponding size than in larger doses given at longer intervals.

The Chairman referred to the susceptibility manifested by certain patients relative to the action of strychnine, and mentioned one case where marked rigidity of muscles was developed soon after the administration of the second dose of $\frac{1}{60}$th of a grain; and another case where $\frac{1}{120}$th grain doses produced the physiological effect very rapidly.

Dr. Caro remarked, regarding the use of bromide of potassium in the treatment of diphtheria, that it was his main reliance, and had been for the last fifteen years. The doctor maintained that there was nothing which dissolved the membrane with greater certainity than this drug. He employed it in solution of the strength of one drachm to the ounce of water, and commonly applied it in the form of spray. Whenever the breathing became dry, he at once resorted to the spray for a few moments, when the child usually commenced to breathe more freely, and, in many cases, coughed and threw out patches of membrane. He recommended its early use, as there was no more efficient method of relieving capillary congestion.

Dr. Finnell remarked, that it was difficult to know what was meant by the term early. When the membrane was formed, the disease was developed; and, prior to that time, how were we to tell whether it was a case of diphtheria or not?

Dr. Caro replied, that when he noticed an increased redness in the throat in a patient who complained of the chilly sensations, general malaise, aching limbs, headache, etc., symptoms commonly attending diphtheria, and the patient had been within the influence of the disease, he did not wait for the formation of the membrane, but at once resorted to measures to reduce the capillary congestion; and for that purpose there was nothing better than the bromide of potassium. Whether such a case was to develop into one of true diphtheria, he was not able to say; but if it did prove to be a case of diphtheria, the remedy which he wished to use had been commenced early; and if it did not prove to be one of diphtheria, certainly no harm was done.

Dr. Finnell continued, that he had not saved a single case in which the membrane had become formed, and inquired of Dr. Caro if he could point to any cases of diphtheria which had got well under his plan of treatment?

Dr. Caro in reply, cited six cases in one family with recovery in every case.

Dr. Finnell said, he believed the best thing for himself to do, then, was to change his location.

Dr. Purple mentioned the fact that the first written description of the disease known as diphtheria, was by Dr. Cadwallader Colden, a New York physician, in the year 1753. Dr. Bard wrote his celebrated paper on Angina in the year 1771, and from this, Bretonneau, in his writings upon this affection, had taken almost the exact language.

Dr. Castle remarked, that in Ziemssen's Cyclopædia there was evidence that the disease was known far back among the Arabians.

SUDDEN BLINDNESS ASSOCIATED WITH PREGNANCY.

The Chairman stated, that he had under observation two cases of utero-gestation, in both of which

loss of vision was suddenly developed, without œdema or premonitory symptoms of any kind. Without theorizing at all, the question arose what should the treatment be for that class of cases? One of them was in the sixth, and the other in the seventh month of pregnancy. The urine had a specific gravity of 1015 to 1020, and contained considerable albumen and some epithelial casts.

One patient was totally blind in one eye, and could see only slightly with the other. From the experience which Dr. Taylor had had in such cases, he recommended the induction of premature labor; for, the great danger was the development of convulsions.

Premature labor could be completed in from thirty-five to forty-five minutes, and delays were dangerous. He was of the opinion that in nine out of twelve cases of this character, the measure would prove a success, and save the life of the woman. So far as the child was concerned there were grave doubts with regard to its viability in any event, as it doubtless felt the powerful impression produced by the circulating poisonous element.

Dr. Hubbard inquired concerning the quantity of water being passed by the patient to which particular reference was made?

Dr. Taylor replied that she was passing about one quart in twenty-four hours, but that he had had just such cases where one gallon was passed within the same length of time.

Dr. Hubbard believed that if the kidneys could be made to act so that the proper quantity of urine would be discharged, such patients can be carried through without resorting to premature labor. He further remarked that he had had three such cases, at fifth, seventh, and eighth months respectively, and all went through safely.

Dr. Taylor inquired whether the eyesight was affected in those cases?

Dr. Hubbard replied that it was not, to any great extent.

Dr. Taylor remarked that, he regarded that symptom, its sudden development without œdema, as the particular feature of his cases; and that, in that particular class of cases, premature labor offered the best results.

Dr. Hubbard believed that, if the woman should receive tablespoonful doses of infusion of digitalis, she would go safely through the night; and from that she could be safely carried through to term.

Dr. Taylor said that the woman had already been carried along for ten days, was perspiring freely, and seemed quite comfortable; but at his evening visit there were some twitchings, and he would not be surprised at any moment to receive a call with the announcement that the woman was in convulsions. The point in the cases was the suddenness with which the symptoms were developed. The albumen in the urine had no special significance except as it pointed in the direction of danger.

Dr. Finnell inquired of Dr. Taylor whether he would perform premature labor before convulsions were developed?

Dr. Taylor replied no; unless there were prominent symptoms indicating their approach.

Dr. Post inquired of Dr. Taylor if he had bled any of this class of patients, before convulsions had taken place?

Dr. Taylor replied that he had not.

Dr. Post then referred to cases in which he had given relief from the threatenings of convulsions by blood-letting; but he had never had occasion to employ it in cases where sudden blindness was present. In the light of his experience, however, he should regard such cases as proper ones in which to resort to this measure, and preferred to first determine what blood-letting would do, in cases which would admit of it, before resorting to premature labor.

Dr. Finnell inquired of Dr. Taylor, how he performed the operation?

Dr. Taylor replied that he ordinarily used Barnes' dilators, until the os internum was dilated to the size of a silver quarter; and then, introducing one or two fingers, performed external version, bringing the breach down, when one or both knees or feet will drop into the hand, when they can be seized, brought down, and the labor very soon completed.

Dr. Finnell inquired what objection there could be to the introduction of first one finger, then a second, and then a third, for the purpose of dilating the os?

Dr. Taylor replied that the dilatation could not be properly done in that manner, for it is the os internum that must be dilated, and the dilator must be carried above that point.

The hour of ten having arrived, the section adjourned to an adjoining room, where difficult cases and local applications for throat diseases gave place to a delicious prescription for gastric disquietude.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, March 24th, 1876.

Dr. E. G. Loring, President, in the Chair.

Prof. M. A. Pallen read a brief but interesting paper upon the mechanism, prevention, and treatment of

PERINEAL LACERATION.

The anatomy of the perineal body was first studied; and it was noticed, as the reader passed to the question of mechanism, that he used the term "procession of the vulva," instead of "retrocession of the sacrum." Under the head of Prevention, Dr. Pallen recommended that, in certain cases, liberal incisions should be made upon both sides, but always above the ducts of Bartholini, and in the interval between labor-pains.

Among the accidental causes of this lesion were mentioned laceration of the cervix, which might permit the head to be driven upon the perineum before it became sufficiently distended to safely resist the pressure; unskilful instrumentation—not that it necessarily attended the use of instruments, for the forceps might save a perineum—but when predisposing causes were present, they might give rise to rupture; unusual size of the fœtal head, perhaps complicated with small vagina and vulva; undue amount of adipose tissue; ulcerations of the fourchette, etc. The predisposing causes were divided into vulvar, vaginal, and pelvic. If the head were suddenly protruded from the vulva with a sharp pain, it was maintained that the attendant might suspect a perineal rupture. For, when the uterine forces were active, and the head was driven through the cervix before proper dilatation could take place, and thus made to descend upon the perineal structures, or when certain other accidental and predisposing causes were present, it was maintained that no skill could prevent laceration. It was believed that many ruptures occurred which passed unnoticed. The doctor, in general terms, dissented from the opinion that perineal lacerations heal spontaneously. Under the head of treatment, Dr. Pallen

advised the immediate application of silver-wire sutures, unless the exhaustion of the patient precluded the operation. He urged immediate operative interference, if possible; on the ground that in no single instance had he seen a perfect restoration of the parts in the cases where spontaneous union had been said to have taken place. In all the cases he had seen, the fourchette had been found destroyed, and the muscles had always been found separated. It was maintained that sutures were the only sustentative measures which should be employed, that they should be deep, and not more than a line apart, and should be supplemented by superficial sutures in each inter-space; that the bowels should be kept soluble by warm enemata, and not constipated by opium, after the common rule; that the vagina should be kept well cleansed; the bladder well emptied; and that advantage might be derived if the nates of the patient were placed in an India rubber ring cushion filled with air. The doctor claimed that no operation for the restoration of the perineal body should be undertaken before determining the position of the uterus, and the condition of the cervix. Retroversion always attended a perineal laceration. The conditions demanding an operation were considered under four heads: Perineal Sundering, Vaginal Sundering, Perineo-rectal Sundering, and Recto-coccygeal Sundering. Dr. Pallen has been successful in nearly all his operations.

Dr. Munde believed that he had prevented laceration of the perineum by resorting to the lateral incisions of the vulvar orifice to which reference has been made by Dr. Pallen. He should hesitate, however, before resorting to the operation in private practice. The plan for prevention which he recommended was that of introducing two fingers into the rectum, and, catching on the malar surfaces, rolling the head from the perineum, at the same time pushing the fourchette backward. Mere support from the outside he regarded as being of no use whatever. Success had attended only about 55 or 60 per cent. of his operations in this class of cases. With regard to the sundering of the muscular structure of the perineum, Dr. Mundé supported the view taken upon that point by Dr. Pallen.

Dr. Darby remarked that there were many operators who performed this operation after a particular method; but that, after all, they were only modifications of the principle first elaborated by Baker Brown. The doctor also maintained that, in fact, all that was really practical had reference to complete and incomplete ruptures; that is, whether or not the sphincter ani muscle was involved. He also spoke in favor of deep sutures, and that some non-absorbing material was always preferable where it is desired to have union take place without being attended by ulcerative action. In that respect there had, perhaps, been some advance made upon the method given by Baker Brown. Cutting the sphincter might be necessary, in order to keep everything at rest, but it should be done subcutaneously, and cut from without in, which would be sufficient to give rest to the deeper parts. Dr. Darby argued in favor of quill sutures, and believed that wire sutures twisted over the edges of the wound in the ordinary manner should never be trusted to close the deeper portions. He also believed that, in many cases, the rupture healed entirely where the woman had been kept in the proper position.

Dr. Gillette thought that he had been unsuccessful in about 60 per cent. of his operations for the cure of rupture of the perineum. He also believed that much could be done in way of prevention, by introducing the fingers into the rectum, and proceeding in the manner already mentioned.

Dr. Messinger had seen some ten or twelve hundred cases of labor, with only one rupture of the perineum of sufficient importance to demand subsequent attention. He argued in favor of manipulation for prevention, and chiefly in the way of controlling the too rapid descent of the head.

New Instruments.

A NEW ETHER APPARATUS.

By OSCAR H. ALLIS, M.D.,

SURGEON PRESBYTERIAN HOSPITAL (PHILADELPHIA).

The apparatus consists of a wire frame-work, sufficiently large to cover the lower part of the face. The wires are parallel, and about an eighth of an inch apart. Between the wires, from side to side, a strip of bandage two and one-half inches wide is passed. The instrument is only about four inches long and three inches at its greatest width, and yet it consumes more than three yards of bandage when passed between all the wires. By further reference to the figure it will be seen that each section of the bandage is separate from the adjoining one, thus permitting the air to pass freely to both sides of it. I usually supply the ether from a graduated bottle furnished with a dropper-cork, as by such a convenience I can add

the ether as gradually or as rapidly as the case may demand.*

My mode of using it is as follows:—Placing it over the face, I sprinkle on *a few drops* of ether,—I mean literally but a few drops. In a few seconds I add a few more drops; and usually in from half a minute to a minute I find that I can drop it more constantly. As soon as I notice *the deep inspirations*, I pour on a small stream, watching carefully least I irritate the larynx, and as soon as I find the patient tolerant of its vapor, I add it in larger quantities, and as rapidly as can be evaporated, and am usually gratified by seeing my patient pass *quietly* under its influence in from three to ten minutes.

Now it may be asked, *What advantages* does this possess over the towel and sponge?

1. It possesses a much larger evaporating surface than either. The whole amount of bandage consumed is eleven feet and two inches, and the entire evaporating surface is over seven hundred square inches. No two of its folds touch, and hence the ether cannot remain in a fluid, but must rapidly assume the ethereal

* Such a cork can be had at any drug store, and will be found of great convenience.

state. The instrument is just sufficient to cover nicely the nose and mouth—does not interfere with vision, and yet in so compact a form furnishes the vapor in a more concentrated form, for the amount of ether expended, than any instrument with which I am acquainted.

2. With so large an evaporating *surface*, there must be *rapid evaporation of ether*, *rapid anæsthetic effect*, and *economy of ether*. The amount of ether consumed is always in direct ratio with the time required to effect anæsthesia. When I use but *two ounces*, the patient is usually ready in six minutes.

3. The instrument is designed to cover accurately the nose and mouth, so that there is no escape of ether at the end applied to the face. In this, it presents a marked contrast with the usual mode of administration. The tendency of the vapor of ether is to escape, not at the top of an instrument, but, owing to its great specific gravity at its most dependent portion. This instrument is open at the top, first, because there is a minimum waste of ether by such an arrangement; secondly, because it permits the ether to be dropped on constantly and in small quantities; and thirdly, because such an arrangement permits the operator to impregnate the respired air to any desired degree through a *constant* supply.

4. There is no exclusion of air, and if properly used, there is not the slightest laryngeal irritation.

To avoid this, one must bear in mind that a few drops at a time are all that are required for the first one or two minutes, when *gradually* it can be increased to any desired degree. By this means we may avoid also the resistance that is often shown when ether is given rapidly at first. In my entire use with the instrument, I have rarely required any assistance in governing the patient, and in a large per centage of cases they pass under its influence without a struggle. I have given it frequently for Dr. Washington L. Atlee during the past year, and in not a single case was there voluntary resistance or a perceptible stage of excitement.

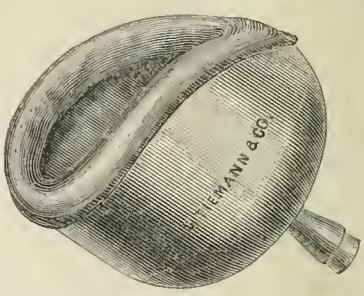
5. The instrument is especially serviceable when a prolonged use of ether is required. A slight *dripping* will suffice to prolong the effect, and economy of ether, though not a great desideratum, is still worthy of consideration.

A MODIFICATION OF LENTE'S ETHER INHALER.

By F. D. LENTE, M.D.

It is probable that the profession begin to think that they are going to be overwhelmed with as many varieties of inhalers as of vaginal specula; but, as the writer was a pioneer, so to speak, in the defence of ether as against chloroform, and the contriver of the first ether inhaler in this country, he may be pardoned for calling attention, after the lapse of so many years, to a modification of his apparatus, especially as it secures a marked simplification and a great reduction in the prices, its former complexity and consequent high price being apparently the only obstacles to its general introduction.

A person thoroughly conversant with the use of ether can succeed quite well, though with a waste of the drug, and greater annoyance to the operator and assistants, with an extemporized apparatus, a towel and stiff paper formed into a cone, or a cup sponge enveloped in some impervious material. The great objection, however, to a soft apparatus is that its air space is liable to be, and almost invariably is, much contracted during the struggles of the patient by the pressure exerted upon it either by the administrator or the patient, who frequently clutches it and gets it



out of shape, and by losing its stiffness from other causes, so that, as the writer has not unfrequently seen, the patient's struggles are mainly caused by having but little chance to breathe either air or ether. The writer formerly contended that, in using the inhaler, the admixture of air should be prevented *as far as possible*. This was owing to the imperfect fitting of the different parts of the instrument, and of the cushion to the face, more air than necessary being thus admitted. With the present apparatus, however, its improved shape, and better fitting cushion, all entrance of air may be prevented, which was never considered desirable. An arrangement is, therefore, made for the admission of more or less air at the apex of the cone. But, at the same time, the writer adheres to his original idea that *but little air* should be admitted after the patient *is able to breathe with tolerable facility* —that is, if we desire *rapid* etherization, which is *not* desirable if the *operation* is to be a protracted one. He is, therefore, of the opinion that the recently contrived *open* inhalers will eventually be superseded in the hands of those who have the opportunity to become thoroughly acquainted with the operation of both, by the conical forms, with a more restricted admission of air. Lately, when called upon to give ether repeatedly to a brother surgeon for operative procedures, he used Allis' open inhaler, and the extemporized cone (towel and napkins) successively, and both the patient and the assistant physicians noticed a marked difference in favor of the latter.

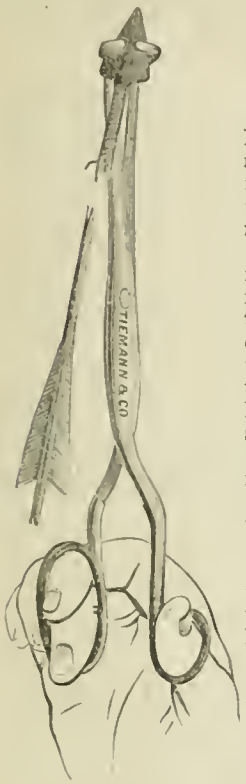
The present instrument resembles very much the face-piece of Waldenburg's apparatus for condensing and rarefying air; and the idea of using sheet brass and the india rubber *air*-cushion was indeed taken from it. But the air-cushion is a failure, as almost all *inflated* things are, without an improvement suggested by the writer, the stuffing of the tube first with hair, so that, when the air leaks out, the cushion will still retain sufficient of its rotundity to fit the face air-tight. When it is to be used, a handkerchief, or piece of sheet lint, etc., is stuffed into the cone, a wire or whalebone arrangement slipped in to keep it off the face, and it is ready. There is a *hole* in the stopper to admit air, and if more air is needed the stopper can be removed. The ether can be poured in the opening at the apex, in case it is undesirable to remove the cone from the face, or throw it on the cloth. Its cleanliness is perfect, as a different piece of cloth may be used each time.

It will have been noticed by some that Golding Bird has a description of an inhaler in the August number of the London *Lancet* which resembles this very closely. But he has two *valves*, one at the top to

admit air, and one near the base to carry off the expired air and ether. Mr. Pfarre, of 67 Chatham Street, informs the writer that Luer, many years ago, had a contrivance very similar to this, but it has been laid aside and apparently forgotten. It is very likely, however, that an arrangement similar to this for getting rid of the effete air may render etherization less unpleasant, during its early steps at least. We must not forget, however, that while so little oxygen is admitted to the lungs, much less carbonic acid requires to be exhaled.

PALATKA, FLA.,

FORCEPS FOR THE EXTRACTION OF ARROW-HEADS.



BY J. H. BILL, M.D.,

SURGEON U. S. ARMY.

I HAVE devised the forceps represented in the wood-cut for the extraction of arrows, which have been made for me by Tiemann & Co.

The cut describes itself sufficiently, but I will add that for arrows not lodged in bone they should be introduced closed, and used as a snare by which the iron or flint point of the arrow may be entangled. For an arrow lodged, they are to be introduced closed, carried down alongside the flat surface of the arrow-head, opened, and then closed on the foreign body.

In length they are nine inches. From the points to the joint—which must be very strong—is two and a half inches. The handles are crossed, and provided with a ring large enough to admit three fingers. The points are one-half inch or a little less across.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from March 26th to April 1st, 1876.

BENTLEY, E., Assistant Surgeon—Assigned to duty at Camp Independence, Calif. S. O. 25, Department of California, March 18, 1876.

CARVALLO, C., Assistant Surgeon—Ordered to Fort Union, N. M., for medical treatment. S. O. 32, District of New Mexico, March 24, 1876.

FINLEY, J. A., Assistant Surgeon—Granted leave of absence for one month, to date from June 1, 1876, with permission to apply for an extension of one month. S. O. 54, Department of the Missouri, March 23, 1876.

BEDAL, S. S., Assistant Surgeon—To report to Lieut.-Col. G. P. Buell, 11th Infantry, for duty as Senior Medical Officer with the "Scouting Camp" to be established on Devil's River, Texas. S. O. 50, Department of Texas, March 22, 1876.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending April 1st, 1876. WALTER DE F. DAY,
Sanitary Superintendent.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
March 25th.....	0	7	70	3	62	71	28
April 1st.....	0	4	76	5	65	71	26

THE ACTIVE ELEMENTS IN VIRULENT FLUIDS.—At a recent meeting of the French Academy, a lively discussion took place between Chauveau and Colin, the former maintaining his well-known views that in infectious fluids, the agents are minute solid particles, the latter insisting that fluids may still be poisonous when they have been deprived of every particle.

ANDRAL.—Andral, whose death was noted in the last issue of THE RECORD, became a Doctor of Medicine in 1821; after the death of Bertin in 1828, he became Professor of Hygeine; in 1830, he assumed the chair of Internal Pathology—in 1839 was the successor of Broussais in the chair of pathology and general therapeutics. As an instructor, he soon obtained a remarkable reputation. In 1829, he published his *Traité d'Anatomie Pathologique*. In 1834, a third edition of his *Clinique Médicale* had appeared. Andral also published an edition of Laennec's Works in 1837. Between 1840 and 1842, he prepared his *Hemalologie*, in conjunction with Gavarret and La Fond. In 1843, he published his *Traité d'Hemalologie Pathologique*.

PRELIMINARY EDUCATION.—At the close of the medical department of Michigan University, the faculty said that although the requirements for graduation had been increased, the number of failures had been less than at any examination in many years. They report, further, that the movement for preliminary examinations which was begun at this institution has been attended with many good results. It is the design of the faculty to increase the requirements for admission and graduation as rapidly as is consistent with the interests of all concerned.

THE BROMIDE OF ETHYL.—In a communication to the *Société de Biologie*, M. Rabuteau states that the physiological effects of this substance are precisely the same as those of ether. It is, however, less disagreeable to the taste.

GERMAN STUDENTS AT GERMAN UNIVERSITIES.—In the *Gazette d'Augsbourg*, the number of native German students matriculated at Berlin, is given as 1,884; at Leipsic, 2,575; at Munich, 1,087. The theological students number respectively 162, 327 and 84; the law students 807, 1,130 and 257; the medical students 263, 869, and 307; the students of philosophy 911, 1087, and 555. In point of numbers, Munich excels in its instructors, so far as regular professors are concerned, for they have 69 to 61 of either Berlin or Leipsic. Munich has 20 extraordinary professors and honorary professors; Berlin 33; Leipsic 55. The number of private instructors is, 20 in Munich, 73 in Berlin, and 47 in

Leipsic. In Munich there are 9 regular professors in theology; in Berlin, 6; in Leipsic, 7. In the law faculty of Munich there are three regular professors more than in Berlin, and the same number as in Leipsic. The medical faculty of Munich comprises 15 regular professors; Berlin 13, Leipsic 10. The philosophical faculty at Munich includes 31 regular professors, Berlin 33, Leipsic 32.

Parisian Medical Students.—The number of students of medicine registered this year by the Faculty of Medicine, is six thousand five hundred. Six millions of francs have been voted to the city of Paris for the erection and perpetual endowment of additional buildings for this renowned medical school.

Graduates in Dentistry.—Only one hundred and forty six gentlemen graduated from the different Dental Colleges during the recent commencement season.

An Ancient Æsculapian Temple.—A Monolith has been recently discovered in the rear of the Cathedral Nôtre Dame, which is said to prove the existence of an ancient temple, dedicated to Æsculapius. According to a writer on antiquities it is supposed that this temple existed on the present site of the Hôtel Dieu.

Death of Dr. Parkes, F.R.S.—Dr. Parkes, the well-known author of the work on Hygiene, died at his residence in Netley, March 15.

Johns Hopkins' Hospital.—It is proposed to make the medical department of this institution independent of students' fees.

Typhoid Fever from Infected Water.—An epidemic of the above has recently appeared in Breslau. Over six hundred persons have been attacked.

Harlem Flats Nuisance.—Considerable anxiety being manifested in regard to the sanitary condition of Harlem Flats, Profs. Chandler and Day, of the Health Board, accompanied by Sanitary Inspector Viele, recently made a sanitary inspection, in order to recommend some measures for improvement. Three years ago the locality east of Third avenue, between Ninety-third and One Hundred and Second streets, was completely submerged by tide-water, which, in conjunction with the sewerage from the west side of the avenue, produced unhealthful odors. The ground at this low point was filled in during 1874 and 1875, so as to bring it above tide-water, in many cases the filling being to a depth of fifteen feet. In the area between Second and Fifth avenues, and One Hundred and Sixth and One Hundred and Ninth streets, similar difficulties were encountered, and the same policy was adopted. The streets were built up above tide-water, with the exception of One Hundred and Seventh street. At present it is two feet below the highest tide-water, and the land between One Hundred and Sixth and One Hundred and Eighth streets is completely under water at certain seasons. The Commissioners think that by raising One Hundred and Seventh street to the level of the surrounding streets, they will compel the owners of lots on both sides of it to fill in their property. It is thought that the cost of this improvement will not be over $15,000.

Prof. Joseph Fayrer, of India, of cobra poison fame, has been made Knight Commander of the Order of the Star of India.

The Plague has reached Bagdad, where there are ten cases daily. An Egyptian quarantine of fifteen days is established for all arrivals from the Persian Gulf.

The Instruction of Idiots.—In order to make a proper classification of the inmates of the Idiot Asylum on Randall's Island, the Superintendent has been directed to prepare for occupancy the building formerly known as the "Baby Nursery," and the Resident Physician will so select its occupants that the teachable inmates shall be completely separated from the others who are more seriously affected.

The Surgical Congress of Europe is to meet in Berlin, April 19th.

Bellevue Medical College.—Dr. Wm. M. Polk has been appointed lecturer on Materia Medica at Bellevue Hospital Medical College.

John Morgan, F.R.C.S.I., Professor of Anatomy in the Royal College of Surgeons, in Ireland, died in Dublin, Saturday, March 4, of enteric fever, aged 47 years. His skill as a teacher, and his success as a surgeon secured for him an enviable reputation. His studies in anæsthesia, which commanded so much attention at the time, resulted in the re-introduction of ether in Irish surgical practice.

Opium Trade.—The Anglo-Oriental Society has urged upon the British Government the desirability of restricting the opium traffic in China and the Indian Archipelago.

Molecules in the Germinal Matter of Eggs.—Mr. Sorby, in a paper recently read before the Royal Microscopical Society, London, in speaking of Darwin's Pangenesis theory with reference to the number of molecules in the germinal matter of eggs, and the spermatic matter supplied by the male, says that in $\frac{1}{10000}$th of an inch cube he reckons:

Albumen.....	18,000,000,000,000 molecules.
Water	992,000,000,000,000 "
	1,010,000,000,000,000

or in a sphere of the same diameter, 530,000,000,000,000 of the two components.

According to Pangenesis theory, the remarkable facts of inheritance, extending even to the reproduction of unimportant peculiarities of parts or organs, and the occasional outbreak of ancestral characters that have been dormant through several generations, are accounted for by the supposition that each part of an organism contributes its constituent and effective molecules to the germ and sperm particles. These dormant germules must be extremely minute, as well as extremely numerous. Mr. Sorby assumes that they may be spheres, each containing a million molecules, and that one thousand of them would make a mass just within the reach of microscopic vision—all of which we recommend to the diligent student of microscopy.

Weekly Bulletin of Medical Societies.

Saturday, April 8.—N. Y. Medical and Surgical Society.

Monday, April 10.—N. Y. Opthalmological Society; N. Y. Medico-Historical Society.

Tuesday, April 11.—East River Medical Association; Yorkville Medical Association.

Wednesday, April 12.—N. Y. Pathological Society.

Friday, April 13.—N. Y. Medical Journal Association, and Harlem Medical Association.

Original Communications.

MATERIA MEDICA, THERAPEUTICS, AND PHARMACY OF THE ANCIENT EGYPTIANS.

By CHARLES RICE,

NEW YORK.

The progress of the exact sciences has in modern times so much absorbed the attention and study of all interested, that only a comparatively small number have been willing or able to devote some of their leisure to the history of the various branches of natural science in the past. The importance of these historical investigations is often overlooked or underrated, and we should welcome any positive additions made to our knowledge of the state of the arts and sciences in ancient times.

Medical science, and in its wake pharmacy, although now standing on a sounder basis than of old, owing to the strictly scientific experimental and inductive methods pursued in its various fundamental departments, may still derive much indirect advantage from a study of their own past. In the writings of the great ancient physicians, as a rule, calm judgment, sound common sense, and a multiplicity of resources under the most trying and difficult circumstances, stand out broadly from among the mass of antiquated and worthless material, and many a hint may even yet be gathered therefrom and used with advantage by the modern followers of Æsculapius.

During the month of September of last year I received, for inspection, the first copy of the Papyrus Ebers which reached this country. I made extensive extracts at that time, intending to publish whatever might be of interest, and contribute to the history of medicine and pharmacy, but I could not find time to work up my materials into a connected shape. Since then, the late librarian of the Astor Library in New York, which possesses a copy of the work, has published a brief but excellent account of the work in the *N. Y. Tribune* of Nov. 9, 1875, which has found its way into various journals (as, for instance, the *Chicago Pharmacist* of November; see also Dr. H. C. Bolton's paper in the *American Chemist*, Vol. 6, No. 5); and some of our readers probably possess already a general knowledge of the character of the work. The account given in those papers, however, is not nearly as full as the antiquity and importance of the work deserve; and I determined therefore to give such additional information of its contents as seem to be of interest. In doing so, I shall leave out all philological material not necessary to the subject, giving only that, which may throw some new light upon the derivation of technical names, or in some way may aid us to understand the facts stated. But in order to put those, who have not as yet seen the previous accounts of the work, in possession of the necessary facts, I will briefly repeat them here.

During the winter of 1872–73, Dr. George M. Ebers, Professor of Egyptology at the University of Leipzig, and Mr. Ludwig Stern, of Berlin, purchased in Egypt a papyrus-roll of a size and beauty exceeding any previously known. It was found to be a complete work, measuring 30.23 metres in length, by 30 centimetres in width. The writing is one side only, excepting near the end, where it runs over on the back; the letters are hieratic, beautifully clear and black, with frequent interspersions of headings and marks of weights and measures in red. Its age was determined by Prof. Ebers by means of the names of the Egyptian kings mentioned in the text, and confirmed by the palæographical examination of the characters, and a calendar inscribed on the first page. The result proves this manuscript to have been written 1552 before Christ, being one of the oldest original documents which have come down to our days. It is now in the library of the University of Leipzig, where it is preserved, cut into sheets corresponding with the pages, in glass-frames.[1]

According to Clemens of Alexandria[2] (died about 220 A.D.), and Jamblichus[3] (about 310 A.D.), there existed 42 so-called Hermetic books of the ancient Egyptians, 36 of which contained their philosophical works, and 6 the various branches of the medical art, namely: treatises on surgery, anatomy, therapeutics, diseases in general, ophthalmology and gynæcology.[4] The present work is, without doubt, the treatise on therapeutics, and it betrays an astonishing knowledge of a great variety of remedies. Evidently at the time of its composition, medical art was in a flourishing condition in Egypt as well as in Syria.[5] We know that the great universities of the Egyptians were at Memphis, Heliopolis,[6] Thebes, and Saïs and Chemnu, at all of which places the medical art was studied and taught, and where important consultations on difficult cases were wont to take place. The papyrus shows that in the sixteenth century before our era there were learned men in Egypt, who could make intelligent observations of disease, combine complicated recipes, and use them with judgment. The author even mentions remedies which have come down from *ancient* times, as e. g., a species of collyrium originated by Xui, an *ancient* physician, or when he discusses the antiquity of the use of the teqem-tree.[7] Although incantations and invocations play a considerable rôle in the treatment of diseases, because priestly physicians could not do well without them,[8] still there is an entire absence of galimatias or gibberish. In those ancient times the magic art was strictly interdicted, and even

[1] The title of the work, translated from the German is: *Papyrus Ebers, The Hermetic Book on the Materia Medica of the Ancient Egyptians, in Hieratic Writing. Edited, with indices, and introduction, by George Ebers. With hieroglyphic-latin glossary, by Ludwig Stern, under the patronage of the Roy. Bureau of Education of Saxony.* Leipzig, 1875; 2 vols., folio. A translation and commentary are promised by the editor. In the original, although it is a continuous roll, the text is nevertheless divided into sections, corresponding to what we may call pages, numbering 110, each of 21 or 22 lines.

[2] *Stromata, ed. Potter*, VI., p. 758, § 634.

[3] *Myster.* 8, 1 sqq.

[4] The priests or pastophores ("carriers of the sacred symbols and vessels," mentioned also in the body of the work) had to commit all these works to memory *by oral instruction only*, exactly like the brahmans of India, who are required to study and learn the Vedas only by oral teaching; and although the number of those who adhere to the old tenets is gradually dying out, still there are found numbers of sacred scholars, or bhattâchâryas, who have all the holy writings by heart.

[5] On page 68, line 8 of the text, there is mentioned a remedy for the eyes, "*according to the authority of a Senate of Byblos.*" Byblos, the *Egyptian* name of which is Kepni, *Heb.* Gebal, was a city of Syria, now Jebeil, of which a singular legend is related by Lucian de Syr. dea, 7.

[6] Strabo (died 24 B. C.) yet "saw the large house at Heliopolis, in which the priests, skilled in science and astronomy, had once dwelled," and he adds, that "at his time the science, as well as the priests, were things of the past" (17, 806).

[7] Other allusions to older writings are: pg. 75, 12: "*Pay well attention. This is a genuine remedy, found during a search in the temple of Un-nefr*" (= Osiris-Agathodæmon); pg. 103, 1: "*Remedy to cure all bodily pains, as it was found in writings under the feet of the Anubis-statue at Chesem. It was brought to His Majesty of Upper and Lower Egypt, Usaphais, the just.*"

[8] The same is true of the ancient Hindus, one of whose sacred books, the *Atharvaveda*, is full of incantations for the removal of diseases (chiefly the "takman," presumably an eruptive fever), and is likewise full of medical and therapeutical allusions, on which I will endeavor to give information hereafter.

Rameses III. yet punished alchemists and magicians with death. The art of healing was communicated by the Egyptians and Phœnicians to the Greeks,[9] among whom it was held in the highest esteem, even in the earliest times, when it yet stood in close connection to Vaticination (Mantic); it was always considered as an occupation worthy of a freeman, while among the Romans it often descended into the hands of slaves. In many Greek states the physicians received public salaries,[10] in others they practised for fees,[11] sometimes paid in advance,[12] to cover expenses of pharmaceutical preparations, which they themselves procured. Self-medication, a most common practice with the Romans, was entirely rejected by the Greeks, who permitted only those to practise who had studied under a reputable teacher, and we find even traces of suits of malpractice. Later, a number of specialists made their appearance as oculists, aurists, dentists, surgeons, and even female gynæcologists.[13] But in after-Christian times the black art began to make inroads into the science, gradually corrupting and almost obliterating it.

Although the present papyrus was found near the necropolis ("City of the Dead") of Thebes, it was certainly written in lower Egypt; as was also another more recent medical papyrus, now in the possession of the Berlin Museum, which was found in an earthen vessel at Saqqarah, that is, the necropolis of Memphis. In this connection it may be interesting to mention that in addition to these two, there is another medical papyrus of 15 pages in the Berlin Museum, one in the Museum in Leyden,[14] one in the British Museum,[15] one in the Musée de Louvre at Paris, one in the Viceroyal Museum at Bulaq, and one in the Museum in Turin,[16] besides a medical work in Coptic, written about 900 A.D., but composed much earlier, which is evidently derived from a work similar to the Papyrus Ebers.[17] Finally, L. Stern discovered in the library of the Khedive at Darb el Gamamiz a copy of the Arabic medical work of Abu Sahl Isa ibn Yahya el-Mesihi, a converted Copt, the end of which is almost a verbal translation of a portion of the Papyrus Ebers, and is entitled, "Chapter on Remedies," and mentions a hermetic text.

I will now proceed to give a summary of the contents of the papyrus, followed by an account of the weights and measures and the materia medica of the work.

1. *Therapeutics:*—Mention is made of various Purgatives; Diuretics; Anthelmintics; Antilithics; Tonics; Abortives (treatment per vaginam). Remedies for incontinence of urine; strangury; fistula; hæmorrhoids; do. for diseases of stomach and heart; do. for hemicrania; diarrhœa; infantile diarrhœa; lymphatic swelling in groins and throat; stricture; itch; conjunctivitis; lippitudo; albugo corneæ; cataract (treatment: dried children's fæces); "smaragd-disease" (glaucoma?); blindness; gerontoxon (arcus senilis); "crocodile-disease" (probably pterygion[18]). Remedies for removing granulations, and to contract the pupil; do. for inflamed eyes, to be used at various seasons of the year.[19] Remedies for tumors in nose; do. to prevent gray hairs and falling out of hairs; to make hair grow—even on a bald head and on a cicatrix;[20] to make it fall out; remedies for cancer: gangrene; for healing wounds and wales; for various eruptions (leprosy; herpes?—on page 27, 16, there is also mentioned a pustular eruption, which Prof. Ebers thinks may have been *small-pox*); for boils, toothache, dental abscesses, erysipelas, swelled legs, lameness, footsweat, shaking palsy, diseased bones, and summer or Nile-fever. Remedies to alter the color of the skin, to give a smooth complexion and to remove wrinkles: do. for prurigo, prolapsus uteri and prolapsus vaginæ, excoriations and condylomata in vulva, pruritus, diseased milk, puerperal fever and amenorrhœa; do. for deafness and running of ears. Instructions how to bandage wounds, how to treat dental diseases and how to extract the child from the womb; methods of expelling urinary calculi, and how to remove them by operation from the male or female, or how to destroy them in the body; how to remove inflamed tumors from the loins of persons suffering from urinary diseases; and means for destroying fleas, lice, serpents, rats, mice, lizards, etc., etc.

2. *Anatomy.*—The work contains proof that the ancient Egyptians were tolerably well versed in superficial anatomy, for nearly all parts of the human frame are mentioned, as well as the large viscera; besides there is mention made of bile, urine, semen, saliva, footsweat, lymph, calculi, moles, etc. The functions of many important organs were however unknown to them, and I am inclined to believe that actual opportunities for studying anatomy offered themselves but rarely, for nerves, arteries and veins are frequently confounded together, as for instance in this passage (pg. 99, 1):

"The secret book of the physician: The science of the movement of the heart: from it go vessels into the whole body. In regard to these the priestly physician Neb-Secht maintains, that 4 go into the cheeks (2 giving sap, 2 blood), 4 into the interior of the temples, 4 each into the head, nose, ears,[21] intestines, spleen, liver and buttocks, 2 each into the kidneys, bladder (?) and testicles, and 6 into each arm and leg. Wherever he may lay his finger, upon any part of the body, he touches the heart."

3. *Weights and Measures*—Weights are indicated by

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[9] This fact, well known from the admission of the ancients themselves, has obtained further and conclusive proof by comparison of the contents of the medical works of the Egyptian and Greek physicians; a number of technical terms, names of remedies and modes of treatment being clearly derived from the Egyptian text books. In Galen's days (born 131 A.D.) the science had already much degenerated.

[10] See *Strabo*, 4.181; *Diodor*, 12.3.—About 540, B.C., *Democedes*, a celebrated physician of Croton, received as high a salary as a talent of silver ($1,926); when called to Athens, he received 100 minas ($1,710), until Polycrates, of Samos, gave him two talents (Herod. 3, 131).

[11] Among the Romans the usual average compensation for a medical visit or consultation was 1 *nummus* (about 29 cents); but we read of fees as high as $10,000 (Plin. hist. nat. 29, 1, 10, and 22); and the court-physicians of the Emperors had salaries of about $15,000, and one even of $20,000.

[12] In some portions of China the custom prevails to pay a physician a regular monthly or weekly salary, which he receives as long as the members of the family, for or from whom he receives it, are in health. During their sickness the salary is stopped, until recovery has taken place. A truly Chinese bargain!

[13] In Athens slaves and women were not allowed to practice medicine. Later, however, when a woman, Agnodice, had been discovered exercising obstetrical practice in man's attire, for which she was to have been punished, the women of Athens took up her cause, and succeeded to have the laws so altered as to permit females to practice. (See *Hyg.*, 274.)

[14] The Greek text of this was published by C. Leemans. See also *Reuvens* in his "*Lettres à M. Letronne.*" This is very valuable on account of the many names of plants and minerals which it contains.

[15] This is a palimpsest dating from the 18th dynasty, 7 inches wide and 8 feet long, containing considerable gal matias.

[16] Contains a magic text interlarded with medical chapters.

[17] Instead of the Egyptian names of Gods (as *Ra*, *Shu*, etc.) there are invoked archangels, among them *Oriel* (Uriel), *Gabriel* (Michael), and *Raphael*.

[18] So-named by the Greeks, on account of its similarity to a finely-reticulated insect-wing, which the head of a crocodile resembles.

[19] The Egyptians have always suffered from many eye diseases. See *Pruner*, *Die Krankheiten des Orients*, page 432.

[20] On page 66, 15 a remedy is quoted, having the following commendatory title: "*Another remedy to cause the hair to grow, invented by Lady Ses, the mother of his august majesty the King of Upper and Lower Egypt, Teta, the just.*"

[21] Page 103, 15: "*To the right ear lead two nerves, by which the spirit of life enters; to the left ear lead two nerves, by which the spirit of death enters.*"

numbers surmounted by a dot. The numbers occurring in this manner are 4, 16, 32, 64, as fractions of 1. The unit of weight finds its equivalent in the later Arabic *dirhem*,[22] or drachm, which name, in the absence of another, has been chosen by Prof. Ebers to denote it.

The unit of measure is the *tenat*, equal to 0.6 of a litre. Another is *hemu* (*Heb. hin*), equal to 0.465 litre. There are special signs to denote these, as well as to express fractions such as $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$. $\frac{3}{8}$ is expressed by putting side by side the fractions $\frac{1}{2}$ & $\frac{1}{8}$; $\frac{1}{8}+\frac{1}{8}=\frac{2}{8}$; $\frac{1}{8}+\frac{1}{4}=\frac{3}{8}$; $\frac{1}{4}+\frac{1}{2}=\frac{3}{4}$. A perpendicular line opposite the several ingredients of a mixture denotes equal parts.

4. *Materia Medica.—a. Minerals.*—Many metals or metallic compounds are mentioned, but not all are recognizable.[23] We find mention made of sea-salt, nitre, charcoal, lead, bronze, antimony,[24] copper,[25] lapis lazuli, sapphire.

b. Animals.—The following are mentioned as furnishing material for certain remedies and preparations: crocodile (2 varieties),[26] ass, bee, beetles and flies, stag, buffalo, roe (Capra hircus), hedgehog, lizard, cow, ox, wild cat, swallow, camel, pig, ram, greyhound (Canis vertagus, imported from Abyssinia), hippopotamus, bat, goose, tortoise. In addition, the following are mentioned as nuisances: flea, louse, rat, mouse, dog-tick, and various worms, chiefly the tape-worm (Tænia solium).[27]

c. Plants.—*Acacia vera* Willd. (*Egypt. sentet*, now *sont*), acacia.—*Acorus Calamus* L., sweet flag.—*Hæmatoxylon Campechianum* (?) Lour., logwood.—*Artemisia* (probably *Pontica* L.), Roman wormwood[29].—*Balsamodendron Myrrha* Nees., myrrh[30].—*Boswellia serrata* Roxb., frankincense tree[31].—*Cicer arietinum* L., chickpea[32].—*Cocos fusiformis* Willd. (*Ebenus Æthiopica*), black ebony tree[33].—*Coriandrum sativum* L., coriander.—*Crocus sativus* L. and other species), saffron[34].—*Andropogon Schœnanthus* L., sweet rush.—*Cucumis melo* L., melon.—*Cuminum Cyminum* L., cumin[35].—*Citrus medica* Risso, citron (the fruit).—*Ceratonia Siliqua* L., St. John's bread[36].—*Cyperus comosus* L., hairy rush[37].—*Ficus sycamorus* L., sycamore fig-tree[38].—*Hyacinthus* (nonscriptus? L.), hyacinth[39].—*Hyoscyamus niger* L., henbane.—*Hyphæne cucifera* Persoon (*H. Thebaica* Gaert. *Cucifera Thebaica* Delile), ginger-bread-tree, dum palm[40].—*Juniperus communis* L., common juniper, and *J. oxycedrus* L., Spanish juniper[41].—*Lactuca sativa* L., lettuce[42].—*Linum usitatissimum* L., flax.—*Mandragora officinalis* Willd., mandrake. Abraun (fruit and root)[43].—*Morus nigra* L., mulberry[44].—*Nymphæa lotus* L., lotus[45].—*Olea Europæa* L., olive tree[46].—*Parietaria officinalis* L., helsine, wall-pellitory.—*Phœnix dactylifera* L., date tree[47].—*Pinus Cedrus* L., Cedar of Lebanon[48].—*Pistacia Lentiscus* L., mastich tree[49].—*Pistacia Terebinthus* L., turpentine tree[50].—*Punica granatum* L., pomegranate.—*Ricinus communis* L., castor-oil-plant[51].—*Salix* (species?), willow.—*Sesamum orientale* L., gin-

[22] The Arabic *dirhem* or drachm equals 48 grains, and is even now divided into 64 parts, called *kamhah* (wheat grains), four of which make a *kirat*. Now as 1.61 dirhem or 1 kamhah is frequently prescribed of substances, where evidently a larger quantity is intended, Prof. Ebers conjectures that the unit is really not the drachm, but the *didrachm*. This supposition is strengthened by the fact that the corresponding equivalent in *Coptic* (which is a descendant of the ancient Egyptian), namely κιτε or κατε, may denote either weight; and also, because the sign for $\frac{1}{2}$ *tenat*, which was originally a liquid measure, occurs likewise as weight, namely equal to one-half of our unit, which sign has come down to us in nearly the same shape (𝄾), and with nearly the same value as the *full weight of a Greek dirhem*.

[23] Compare *Lepsius on Metals in Egyptian Inscriptions, in Abh. d. Akad. d. Wiss. in Berlin*, 1851, 77, 126.

[24] The Egyptians used black native sulphide of antimony as a collyrium, and it is even yet employed by the women of Egypt to color their eyelids. The *Egyptian* name of antimony is mestem or stem, *Coptic* σθημ or στημι-stibium, στιμμι. We possess several recipes for preparing these collyria, which were usually kept in small boxes, often partitioned off to hold several kinds, like one preserved in the Paris Museum, being no doubt identical with what *Pliny (hist. nat.* 13, 5, 11) calls *scrinium antiparum*, the first of which was found by Alexander among Darius' baggage.

[25] According to *Lepsius* this is not copper, but *electrum*, τὸ ἤλεκτρον. *Le Page Renouf* says it is *æs Cyprium* or *ustum*, χαλκὸς κεκαυμένος, used for destroying proud flesh.

[26] One is called *utu*, the other *mseh*, *Arab. al tamsah*, by metathesis χάμψα *Herod.* 2, 69.

[27] This is supposed to be this variety, from the fact that *Botryocephalus latus* or *Tænia lata*, which are common in Switzerland and Russia, are very rare in the southern countries of Europe and in the East.

[28] The identity of this is not quite certain. It was an odoriferous herb brought from Arabia, and very likely was *zizer wood*, a species of aroma highly valued by the orientals. On its use see *Dioscor.* 1, 21.

[29] Possibly *Art. Cina* Wikst., *Arab. shaanah* ("the green").

[30] *Plut. de Isid. et Osir.* 81-81: "At noon-meal the Egyptians fumigate with myrrh."

[31] The resin is the part used (*olibanum*.)

[32] *Greek* ἐρεβίνθος (modern ῥεβίθια); cf. *Galen. de alim. fac.* 1, 22. *Athen. Deipn.* 2, 41.

[33] *Ebony*, derived from this source, as well as from *Diospyros mespiloides* Roxb., and an inferior kind, viz.: *Anthyllis Cretica* L. (*Theophr. hist. pl.* 4, 1, 6) were used chiefly as astringents; cf. *Dioscor.* 1, 29.

[34] Used in a variety of ways, in infusion, decoction, in mixtures, and in salves. *Dioscor.* 1, 25-26 says, that the saffron-paste, κροκόμαγμα, is made from saffron-salve, κρόκινον μύρον, by expressing the aromatic parts and shaping them into forms.

[35] *Hippocrates* called the Ethiopian Cuminum, "*the royal*" (Βασιλικόν), after this he placed the Egyptian, and then the other.—*Diosc.* 3, 61.

[36] *Egypt.* nan, *Arab.* charrub=Carob tree, was very much used. *Theoph.* 4, 2, 4, says that it does not grow in Egypt, and was wrongly called at his time "Egyptian fig." *Galen. de al. fac.*, 2, 23, pronounces it as not being wholesome food, and says it should not be imported.

[37] This is the *Greek* σάρι or σαρῖν (*Egypt.* sara'), which, according to *Theophrastus* (*hist. pl.* 4, 8, 5), grows in swampy places inundated by the Nile.

[38] All species of *Ficus* were held in great esteem by the ancients; the wood is almost indestructible, and every portion of the tree is of value. *Ficus Bengalensis* L. (*Ficus Indica* Roxb.), the banyan tree, yields a white glutinous juice, used as an application to the cracks on the soles of the feet; see *Ainslie, Mat. Med.* II., 10.—*Ficus oppositifolia* Roxb. and *F. polycarpa* Roxb. are valuable emetics (fruit, seeds, and bark).—*Ficus religiosa* L. plays an important part in Hindu religious ceremonies, and occurs already in the Vedas (*Rigv.* 1, 135, 8, etc., *Atharvav.* 3, 6, 1, etc.).—On the medical uses of *Ficus carica* L. among the Hindus, see *L. Da Costa* in *Cuchyne's Ind. Med. Journal*, 1837, 731.

[39] *Egypt.* sesen, *Heb.* shoshan, *Arab.* susan: this, however, is supposed to be rather *Nymphæa lotus*.

[40] Κουκοφόροι (*Theoph.* 4, 27). Cf. *Alex. Ziegler, Reise im Orient*, Leipzig, 1855).

[41] The fruit, tops, and oil were used. The Greeks enumerate in their recipes of κῦφι two species (ἀκενθίδες δυο, *Dioscor.* 1, 103), the *large* and the *small*; the former is *oxycedrus*, the latter *communis*.

[42] Lettuce (ἐρίδαξ) was used by the Greeks as a soporific (*Hippocr. de Morb.* 4, 2; *Celsus* 2, 32; *Pallad.* 2, 14; *Martial*, 13, 11), but the species *virosa* seems to have been the one, the juice of which, mixed with opium (μηκώνιον), was used for this purpose. (*Dioscor.* 2, 165).

[43] The root is split, and has been compared to human legs, from which circumstance originated many superstitious uses. *Columella* (10, 19) calls it "half man, half plant." See *Paul Ægin. ed. Fr. Adams*, II., p. 219.

[44] The fruit, bark of root, leaves, and juice of root were used by the ancients. The fruit was called "bread" by the Egyptians. It was used against fevers, by applying it with scented oil upon the region of the stomach (*Athen. Deip.* 2, 51). The same authority observes that the fruit is sessile, without a stalk (φέρει δὲ τὸν καρπὸν ἢ ἀγίστια συκάμινος ἀπὸ τοῦ ξύλου καὶ οὐκ ἀπὸ τῶν ἐπικαρπίων, *Ibid.*).

[45] This is according to *Unger, Bot. Streifzuge* 4, 122, the plant shoshan (see note 39). The Egyptians collected it, dried it in the sun, comminuted the poppy-like body within the flowers, and baked bread of it (*Herod.* 2, 92; *Theophr.* 4, 8, 9). *Diodor. Sic.* (1, 10, 34, 3) says, that they have learnt the use of edible fruits and of lotus from Isis and the old King Menas.

[46] The fruit and oil were used.

[47] The fruit alone is used. An infusion of it yields by fermentation a species of wine, which is yet much used in Nubia, where it forms a general every-day stimulant.

[48] It is frequently doubtful whether by the oil is meant oil of Juniper or oil of Pinus Cedrus.

[49] *Egypt.* tenten, *Greek* σχῖνος. Forms an ingredient in kyphi. *Palladius* 2, 20, mentions an oleum lentiscinum=λέντισκον σχῖνον of *Dioscor* 1, 50, which is prepared from the ripe seed by extraction with boiling water.

[50] *Dioscor.* 1, 50, 1, 91, mentions an oil, τερεβινθινον ἔλαιον, made like mastich oil (see note 49).

[51] Seeds and oil were used. *Egypt.* gaga, *Copt.* κικι, *Greek* κροτων, *Hebr.* kikayon. According to *Dioscorides* (1, 38, 4, 164) the Egyptians do not prepare the oil by boiling the seeds with water, but by expressing the crushed seeds.

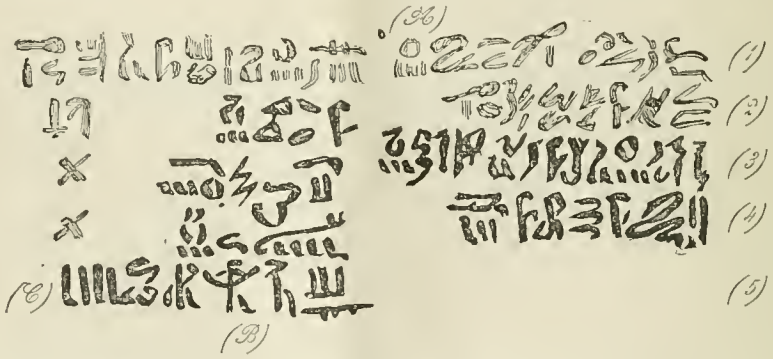
gelly, benne[52].—*Sorghum vulgare* Willd., Turkey millet.—*Tamarix Africana* Desf. and *T. articulata* Vahl, tamarisc.—*Trigonella fœnum Græcum* L., fenugreek[53].—*Triticum spelta* L., spelt, and *T. vulgare* Vill., wheat.—*Vitex Agnus Castus* L., agnus castus.

d. Miscellaneous Remedies.—A great variety of remedies occur, which it was difficult to classify otherwise, and which are therefore placed here together. We find mentioned: decomposing or purulent blood (for external use); 27 various oils, nine of which were considered sacred[54]; beer which had ceased to ferment; vinegar[55]; crude honey; wine; milk; spring-water; dried blood of various animals; sour and sweet grapes; various flowers; tortoise shell; fermented dough; yeast; bread, simple, or mixed with aromatic seeds, or sweetened; wax; eggs; chaff; human brains, semen, urine, fæces and menstrual fluid[56]; water which has been used for washing the genitals; fluid pressed from pigs' eyes; the genitals of cats (most of the last named for external applications only); and a species of lint for surgical dressings.

5. *Pharmacy.*—Although many passages of the papyrus are as yet not fully understood, owing to the occurrence of doubtful technical terms, or names of unidentified plants, animals and minerals, we still find a number of pharmaceutical acquaintances, such as globule, pill, granule, cataplasm, mixture, ointment, aromatic ointment and pomade, collyrium, pastille, clyster, mortars and capsules. A large number of recipes and formulæ are given in the text, as for instance: *For colic-pains: Cumin* $\frac{1}{64}$ 3, *goose-fat* $\frac{1}{8}$ 3, *milk* 1 tenat. *As a diuretic: Honey, St. John's bread, Agnus Castus seeds, of each, equal parts* (1 3). One of the most interesting is the recipe for the *Kyphi*[57], which was a celebrated mixture used by the Egyptians for fumigations, as medicine, and in embalming, the composition of which is given on page 98 of the papyrus as follows:

"*Preparation of Kyphi, to make agreeable the odor of the house or of dresses:*

"*Myrrh (dry), juniper (berries), olibanum, mastix (twigs), fenugreek (seeds), raisins (*? *temten*), and three



THE ABOVE TRANSLATED INTO THE HIEROGLYPHIC CHARACTER.

Medicine for opening the bowels
Beginning of the Book of the Medicine (1)
Milk
1/3 hena
To cure the sickness of the bowels (2)
Nekaut (?) Pulverized 1/4 drachme
(seeds of the) She hut plant rubbed up with Vinegar (3)
Honey
1/4 drachme
To be drunk by the patient. (4)
Cook pour out, eat for four days. (5)

[52] Oil of sesame was used quite frequently. The *Egyptian* term is semsemt, *Copt.* σεμσημ, *Arab.* simsim.

[53] The seeds. This plant has a variety of names: *Egypt.* sabt. *Greek* βουκερας (oxhorn), αιγόκερας (ram's horn, whence the *German* appellation Bockshorn), and τῆλις (*Modern Greek* τῆλυ).

[54] These are in frequent use, often combined with honey, corresponding to the oil-honey or ἐλαιόμελι mentioned by *Dioscor.* 1, 37. We also find "oil made two days before," and "winterstrained oil."

[55] The Egyptians were celebrated for their excellent vinegar; according to *Athen. Deip.* 2, 67, they prepared it from grapes, raisins and dried figs.

[56] Excrementitious matter has been used by many nations for remedial purposes. Semen virile and sanguis menstrualis even by the Arabs, according to *Abu Hurairah al Saffuri*. A very full account of excrementitious medicine among the Hindus may be found in *Pharmac. Journ. and Trans. Nov.* 1875, *page* 364.

other unrecognizable ingredients. *Mix them together and put them to the fire* (namely to burn them; may also mean 'and set fire to them.') *For women it is to be prepared otherwise; namely, it is to be boiled with honey, mixed, and formed into globules; they fumigate*

[57] Kyphi is mentioned by *Hieron. in Jovin.* 2, 8. *Scribon. Larg. compos.* 70. *Galen* (several times), and *Plutarch* (*de Isid. et Osir.* 81) mentions the following as ingredients of κῦφι, namely: lemongrass (*Juncus odoratus*), aspalathus (*Cytisus Græcus*), shrubby hartwort (*Bupleurum fruticosum*), mastich (*Pistacia lentiscus*), bitumen (probably means *Chios turpentine*), swamp-grass, (*Ulva conferva*), sorrel (*Rumex*–), the small and large Juniper, (see note 41,) cardamom (*Amomum Cardamomum*), sweet-flag (*Acorus Calamus*).

with them, and also use them as pastilles to make agreeable the odor of the mouth"."

In conclusion we annex a fac-simile copy of portion of a page of the papyrus, with its translation. The lightly-shaded portions of the copy are in the original written in red; the others in black. The reader may compare the lines of hieratic writing of the original, which reads from right to left, with the translation in hieroglyphics, of which the other form of script is an abbreviation, and which are read from left to right.

NOTES ON THE PATHOLOGY AND TREATMENT OF SOME FORMS OF HYSTERICAL DISORDERS.

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NEW YORK.

If hysteria in some of its severe paralytic forms is very untractable, it is by no means unamenable to therapeutic agents. It is well known that some cases of contracture, more frequently of the lower limbs, will, after long duration, simulate all kinds of malformations, and when the muscles have undergone wasting, leave, as a sequel, a useless limb.

But what is the nature of the disease—or, in order to be in accordance with the majority of contemporary pathologists who think that every disease must, in every case, have their *fons et origo* in the same organ—where is the seat of the malady? If a very great number of high authorities see a connection between abnormal states of the female generative organs and the development of hysteria, many others, invested by common consent with just as high authority, deny any such connection. I shall simply state, that diseases of almost every viscus have been traced as the starting cause of hysteria; and that some of its severe forms—contracture, paralysis and wasting—have been observed in children before the age of puberty, and in women after the critical period. A theory which is now gaining ground in France, and which does not lack ingenuity, originated with Professor Charcot. He, after carefully comparing the phenomena of hemianæsthesia, hemiplegia, etc., etc., usually associated with certain forms of hysteria and similar symptoms, which, according to him, are always met with in destructive diseases of that part of the middle encephalon called internal capsule—believes that that part of the cerebral organs is the seat of hysteria in its hemiplegic form at least. I would certainly adopt that theory. Elsewhere I have shown this idea to be somewhat fallacious * (for it is always safe to sail under the same wind with so eminent a teacher as Prof. Charcot), provided the internal capsule were a nerve centre instead of being merely a tract of sensitive and motor fibres, identical with the tract of the spinal cord, is devoted merely to sensito motorial conductions. The study of cases of lesions of the pons Varolii, both in male and female subjects, caused by most diverse diseases, and in which I have very often observed hysterical symptoms, cause me to doubt. These symptoms have been well studied by my friend Dr. E. C. Seguin. He thinks that they depend upon various lesions, more especially of the right hemisphere of the brain, a view put forward by De Fleury, of Bordeaux, in his work on the Comparative Dynamics of the Cerebral Hemispheres, some years since. This opinion, and the assertion that some hysterical symptoms have been observed in diseases of the pons, by Bastian, of London, in his treatise on Paralysis from Brain Diseases, together with a pretty numerous series of experiments on dogs and cats, permit me, I believe, to state, that very likely, hysterical phenomena are dependent upon the abnormal state of either lateral portion of the upper part of the pons Varolii.* I may as well state here that the nerve centres of the pons are perhaps merely passive in the process, and only become organically implicated when we already find contractures and paralyses with atrophy of muscular tissue and the consequent deformities. I have satisfied myself that the origin of the trouble is a vascular one of the nervous centres, an abnormal condition of the so-called sympathetic nerves. The origin of the latter, according to classical authorities, is in the pons; but I believe it is all along the spinal cord and base of the brain, as shown by Vulpian lately, and as taught for now more than twenty years by Brown-Séquard. But, unlike the above named eminent physiologists, I think it probable that the vaso-motor nerves, instead of originating in the axis of gray matter of the spinal cord and pons, penetrate into it, and instead of proceeding from those centres together with the other nerves as they come out, and as Bernard has tried to establish for the so-called cerebral nerves, they only join the nerves of motion and of common and special sensation at their exit from the cerebral and spinal mass, and at the point where they receive their sheathing from the pia mater. For the trigeminus nerve, at least, this point is beyond contest, both experimentally and anatomically. One of the first workers with the microscope in the field of anatomy of the nervous centres, Hanover, has as far back as 1844, most beautifully figured the fibres, cells and small ganglia on the tract, and chiefly on the ganglion of Gasser of the trigeminus. Moreover, Rainey, in a paper published in the *Transactions Med. Chirurg. Society of London*, 1844, states that the arachnoid is the centre from which arise the vascular nerves.†

If after the removal of the whole cerebral hemispheres and ganglia, except the pons, sensations in warm-blooded animals still persist, as proved by the experiments of Vulpian, and more recently of Onimus, Lepine, Brown-Séquard and others; it appears to me legitimate enough to conclude that the vascular nervous centres, which are most numerous around the pons, are altered either directly or indirectly through peripheral sensory fibres. The nature, seat, and duration of any given irritation will determine the variety of diseased manifestations. In this connection I may call attention to the very able pamphlet of my learned friend, Dr. Lepine, of Paris, in which he has reported cases of hemiplegia and other interesting phenomena dependent upon diseases of the lungs, and some very curious and suggestive experiments of my eminent friend and teacher, Brown-Séquard, showing various effects exercised by mere pricks of the lungs and other small thoracic viscera upon the pupil of the eye. These are very interesting facts, which go to support the theory that alterations of the abdominal and thoracic viscera do have a very strong "retentissement" on the vascular centres. Well-known phenomena of hemianæsthesia and anæmia of the skin, or contractures

* The Egyptian women are noted, even to this day, for their bad habit of chewing onions and garlic.

* Thèse Inaugurale, Paris, 1853.

* Brown-Séquard has shown me, some months ago in Paris, dogs upon which he had burnt some part of the convolutions, and found, not only paralysis on the same side, but even paraplegia, alone and hemi-paraplegia. This will dispose of the objection that might be raised that disease of the pons cannot give rise to symptoms simulating paralysis or contracture of the lower limb alone, as in hysteria.

† For more on the subject of vaso-motor centres, see my paper in C. R. de la Soc de Biol., Gazette Méd. de Paris, p. 576 and p. 601. Consult also Rochefontaine, Id., p. 565 and p. 648.

followed by paralysis, deformities, etc., which may become permanent at the end and present a faithful picture of amyotrophic sclerosis (Charcot), and of coxalgia (Brodie, Verneuil, etc.), and even of club-foot. As my intention is only to deal with that form of hysteria which sometimes does ultimately verge in permanent deformities and paralysis through wasting, I shall dismiss the other aspects, however interesting here.

The diagnosis of the disease is not, as a rule, a very difficult one, except perhaps, when it attacks very young males and females; in which cases it may be mistaken for coxalgia, so-called idiopathic contractures following convulsions, wasting of infantile paralysis, club-foot dependent upon organic disease of the spinal cord, etc. But if it is sometimes difficult, when the deformities have been long standing, to discover what is their origin, it is, however, not absolutely beyond our means; careful consideration of the habits of the little patients, and of the onset of the disease will help us a good deal to clear the obscurity; but of this, more hereafter. When the paralysis occupies the upper limb or one side of the body in adult patients, it is much more often the left side. Sometimes the minor symptoms will almost give rise to the suspicion that hemorrhage has taken place in the brain; but the state of the pupils which are dilated in hysteria, and slightly respond to light; the non-deviation of the tongue, the non-alteration of temperature, or its lowering below the normal degree, the loss in a more or less degree of sensation in the paralysed parts; will help us to come to a correct differential diagnosis. When contractures are present it will be easily seen that we have not to deal with hemorrhage or coarse lesions of the brain, by the fact that if we try to push the extended arm by pressing on the palm of the hand in such a way as if to push the limb behind the shoulders, or perform the same operation on the sole of the foot, pushing the leg in the axis of the trunk, we will detect, particularly if the diseases is of long duration, the peculiar shaking common to every form of sclerosis. This aspect of hysteria, as pointed out by Professor Charcot, is due to secondary fasciculated sclerosis of the lateral column of the spinal cord, which, however, he distinguishes from what he has called amyotrophic sclerosis, by the fact that in the last-named disease the cells of the anterior horn of the spinal cord are primarily affected, while in the hysterical wasting under consideration, the cells become affected only as a consequence. Moreover, in all the hysterical shams, however chronic, of muscle disease, galvanic electricity gives rise, both through nerve and directly, to contraction, which it is well known does not take place in the genuine diseases. If we have to deal with contractures of parts only of muscles of the lower limbs, the diagnosis is sometimes more troublesome. To say nothing of the many means which individual ingenuity can suggest, one at least will always settle the case, provided there has not already been a complete wasting of muscles; and that is inhalations of ether or chloroform, and perhaps nitrite of amyl, but chiefly the exhibition of chloral hydrate, in full doses. Indeed by that means it is almost always sure that we shall discover if we are dealing with hysterical mimics of organic diseases of the nervous centres.

In every case, of course, it is most important to know the history of the disease; and if we have to treat children, one of the first points to make clear is, whether they are not addicted to onanism or irritative practices upon the genitals. I have lately seen in Paris a girl eleven years old, not yet menstruated, who presented a deformity amounting to atrophy of some muscles of the leg and club-foot, which could be ascribed to no other cause than that stated above. She is actually highly hysterical.

But it is not enough to try to find out what the characters and features of hysteria sometimes are; by far the most interesting point is the treatment. If in very great number of cases of hysteria the physician has to resort, through failure with all else, to so-called moral treatment, I must say, that in the forms of the disease of which I have been speaking, he will run great risk of allowing permanent impairment of some limb of the patient. Moreover, if the physiological process of the disease be such as I have tried to establish, it is not unreasonable to resort to therapeutical agents, which former experience has taught to be of service in similar conditions. I have sometimes been lucky enough to relieve a few patients suffering from paralysis of motion, and sensation by the use of strychnia, steam-bath, massage, and generous diet. In a long standing case, I tried the actual cautery, applied on the nape of the neck, but perhaps the "emotion" of the patient did all the curative work in this instance. When there is contracture, it will be made to disappear by the use of chloral hydrate, exhibited every other night, and steam-bath on the intervening days, the cold douche only to be applied to the head and neck. The spinal hot-water bag is more efficacious in some cases where only the lower limbs are implicated. Of course, the continuous current of electricity has to be employed; but just as with faradic electricity, it will be found to be of little avail except when directed against the wasting of the muscles. By far the most effective treatment, and chiefly so when there is the shaking, indicating sclerosis of Charcot—consists in large doses of strychnia, and alternately of iodide of potassium in not more than four or five grain doses of the latter, and the application of the actual cautery. I have employed this latter agent, after the manner adopted by Brown-Séquard. It must be used every other day, and in order to be able to do that and also to assure success, the iron must be heated to whiteness, and only allowed to touch the skin, which then peels off just as if scratched very slightly by the nail—and the touches must embrace a pretty large surface in length—on the two sides of the spinal processes.

We must not forget, however, that in some instances of pretty frequent occurrence, all the symptoms described in this lecture will vanish on a sudden with the accompanying circumstances, and phenomena generally described in cases of miraculous cures, but which are also daily met with in practice. I need not say, in dismissing this subject of hysteria, that all those therapeutical means will be found only of temporary efficiency, if the primary cause of the disease is not got rid of, whether it be seated in the genitals, the reproductive organs, the viscera, and the nerves or nervous centres.

LIVING LARVÆ IN THE EAR.

By DAVID WEBSTER, M.D.,

OF NEW YORK.

I HAVE seen two cases of living larvæ in the ear; the first (Mr. G. W. G., æt. 24), I saw at the office of Dr. C. R. Agnew, in the summer of 1874. He gave a history of chronic suppuration of both middle ears, which commenced during an attack of scarlatina, at the age of four. This discharge had ceased at the

age of twelve, and his general health immediately began to suffer, but was restored to its normal condition when the discharge re-established itself, after a cessation of about three months. This patient was evidently a firm believer in the exploded theory "that it is dangerous to stop the discharge from an ulcerated ear." Although the discharge had for many years been very offensive, he had done nothing for it until a few days before I saw him, when his left ear had become painful, and affected with an intolerable roaring. He had then caused it to be syringed with warm water, when, to his great horror, ten or fifteen little white worms were washed out of the ear. The syringing had been frequently repeated, but the pain and noise continued; and, on the morning of the day I saw him, a worm, larger than any before, had been washed out, and there had been some bleeding from the ear.

I found the bottom of the auditory canal covered with offensive pus; the membrana tympani had been mostly swept away; and, coiled up, partly in the tympanic cavity and partly in the external auditory canal, squirming and wriggling about in a very lively manner, was a white maggot. I syringed the creature out with considerable difficulty, as he clung most tenaciously to tissues with which he lay in contact, probably by means of the "strong, but delicate framework, of horny consistency, and two hooks also of a stout, horny structure, articulating with this framework," which Dr. Blake, of Boston, has described.

After assuring myself that I had removed the last of the grubs, I inflated the patient's ears by Politzer's method, and advised the use of an astringent night and morning, after syringing with warm water.

I saw him only once more, nineteen days later. He had suffered no more from pain or tinnitus, and his hearing distance, as measured by the watch, had gone up from three inches to nine inches on the right side, and from half an inch to four inches on the left side. No more larvæ had made their appearance.

The second case I saw at Dr. Agnew's clinic, at the Manhattan Eye and Ear Hospital. This was also a case of suppurative inflammation of the middle ear of many years' standing. The patient complained of pain and roaring, and also thought he felt something wriggling about in his ear. The drum-head and the ossicles had been entirely swept away by ulceration, and the tympanic cavity, on inspection, seemed alive with the squirming little animals. Some of these were dislodged by syringing, and the remainder I stirred up with a little cotton twisted about the end of a dentist's cotton-holder, and afterwards washed them out with the syringe. There were five or six of them.

Dr. Roosa, in his admirable treatise on the ear, says: "The ancient works on aural diseases speak very much of worms in the ear, and of the proper means of removing them. It is probable that these so-called worms were the larvæ of insects, which germinated from eggs deposited in the pus of a chronic suppurative process. Certain is it, that since the habit of cleansing an ear from pus has become a well-recognized duty, the practitioner of the present time sees very little of worms in the ears."

19 EAST THIRTY SIXTH STREET.

MODERN ANÆSTHESIA.—Dr. H. P. STEARNS' article on Modern Anæsthesia, which appeared in a recent number of the MEDICAL RECORD, has been republished in pamphlet form. In this publication some typographical errors which found their way into the original article, have been corrected.

RAPID DIMINUTION OF A REMARKABLY LARGE SPLEEN UNDER THE HYPODERMIC EMPLOYMENT OF ERGOT.

By J. H. MILLER, M.D.,

MOBERLY, MO.

MRS. S., aged 28, married, the mother of three children, of previous good health, was attacked in August last with bilious fever, as she states, recovered, but shortly relapsed, and has since that time been suffering from frequent attacks of intermittent fever of the quotidian type.

Her physician, not having been penetrated with the incandescence of advanced medicine, but a thoroughly stereotyped routinist, put her through on remedies of the most obsolete character; and what her disease had not already done for her, he very effectually accomplished.

On the second day of January I called to see her, and found her in extreme prostration and very anæmic, with dyspepsia, neuralgia, a masked form of intermittent fever, and with a spleen of extraordinary dimensions; so large was it that the whole abdominal cavity, from the extreme left to the middle of the right hypochondrium, and from the umbilicus into the epigastrium, was occupied by its presence.

After improving her general condition by proper alimentation, by tonics, and by stimulants, I addressed my remedies more particularly to the reduction of the size of the spleen, and prescribed for that purpose large doses of quinine, chloride of ammonium and iodine, with iodo-croton liniment externally.

Having failed, after considerable perseverance with these remedies, to elicit a favorable response, I determined to abandon them entirely, and put the therapeutic powers of ergot fairly to the test.

No other remedies were administered except Tinc. gentian, ʒiii., Acidi Hydrocyanic dilut., gtt. xxiv., one teaspoonful thrice daily, for some gastric troubles which seemed to call for special attention.

On the sixth day of February, I made the first hypodermic injection of ergot. I visited her again on the 7th, and made the second injection; and, although I did not find any diminution in the size of the spleen, yet discovered a very sensible change in its character and consistency. On the 8th I made the third injection, and at that visit there was a very perceptible shrinkage. Owing to professional engagements of a different character, I did not visit her on the 9th. On the 10th I made the fourth insertion, and found a very decided diminution in its size; and for four consecutive days I made injections with rapid and marked diminution. On the 14th, it had almost attained its normal size. Thus, from the 6th to the 14th, that enormous spleen had almost entirely disappeared under the hypodermic use of ergot alone. On the 4th of March I called, in order to ascertain if the improvement had been permanent. She met me at the door with a recognition of complaisance and with expressions of profound gratitude. The spleen was normal.

MOBERLY, MO., *March* 8, 1876.

CENTENNIAL MEDICAL COMMISSION.—The number of delegates to be appointed to the above, to represent the Medical Society of the State of New York, is thirty-five. The selection is entrusted to Dr. Thomas F. Rochester, of Buffalo, President of said society.

Progress of Medical Science.

Ovariotomy, with Drainage through the Peritoneal Cavity.—Dr. Olshausen, of Halle, has summarized his experiences in ovariotomy, with especial reference to the use of drainage through Douglas' cul de sac, giving an exhibit of twenty-five cases in which he has operated. He has come to share Sims' former opinion, that the majority of deaths after ovariotomy are due to septicæmia, but thinks that the question of the advisability or not of the use of drainage tubes should be determined by practical experience, and not by theoretical considerations. He discusses the objections to the use of the carbolized spray in the operation; and expresses the opinion that drainage and greater care in preventing septic infection will improve even the admirable figures of Spencer Wells. He gives the details of the operation as he practises it, insisting particularly on numerous antiseptic precautions with carbolic acid. After the removal of the tumor is completed, he makes a puncture from Douglas' cul de sac into the recto-uterine excavation with a trocar of full four-tenths of an inch calibre, and carries a drainage tube of the same size through it, and places it in the superior angle of the wound. He regards the first 48, and, more particularly, the first 24 hours after the operation, as the most important in respect to after-treatment in this method, believing, with Sims, that, during that period, a thin fluid secretion is rapidly produced, having highly septic properties, and that it must be promptly got rid of. To this end, he recommends syringing out the tube with a warm salicylic acid solution every hour or two hours during the first day. He generally removes the drainage tube about the twelfth day. The thermometer generally indicates, by the third day, what is to be the fate of the patient. Of the twenty-five cases which he reports, the last fifteen were treated with the drainage tubes. Of the first ten cases two recovered; of the last fifteen, eleven. He does not, however, claim the whole of the improvement for the drainage, but attributes it to better surroundings of the patients—greater cleanliness, and especially thorough disinfectant measures, and to his own increased skill. He believes, however, with Nussbaum, that drainage has saved many cases that would otherwise have rapidly succumbed.—*Berl. Klin. Woch.*, March 6 and 13, 1876.

The Inoculability of Relapsing Fever.—Dr. Motschutkoffsky, of Odessa, has been experimenting for several years with inoculations upon man and animals with the matter of typhus, typhoid, and relapsing fevers, and was successful in the case of the last disease only, and in the human subject. He succeeded only by the use of the blood, taken during a paroxysm of fever, and it made no difference whether it contained spirilla or not. The disease thus induced differed in no respect whatever from that due to other causes, nor was any other form of fever ever developed from inoculations of the blood of relapsing fever. The period of incubation was between five and eight days. Blood kept hermetically sealed for two days in a capillary tube yielded positive results, as did also blood diluted in equal parts with a watery one per cent. solution of muriate of quinine, but when diluted with the one-tenth part of spirit the results were negative.—*Centralbl. f. d. Med. Wiss.*, March 11, 1876.

Typhoid Fever in a Child, with Rupture of the Spleen.—Dr. Wittmann, from observations in the Children's Hospital at Pesth, declares that in all cases of typhoid in which hemorrhage from the bowels occurred, it was preceded for a few days by slight hemorrhages from the mucous membrane of the mouth and gums. He gives the history of a well-marked case of typhoid in a boy of ten, admitted to the hospital, December 29th, with the history that he had been seriously sick for five days. The temperature ranged between 104° and 106° F., the pulse from 120 to 132; there was delirium at night, slight bleeding from the lips and gums appearing on the 30th. The cold water treatment was not used, because a little girl, on whom it had been used under like circumstances a few days before, had died of hemorrhage from the bowels. On January 2d, however, delirium increasing, he was put in a wet pack. The next day there was sensitiveness in the region of the spleen, and the bleeding from the mouth continued in spite of various modes of treatment. On January 5th the stools contained blood, and he fell into a state of collapse and died, the temperature falling from 104° to 97.2°, F., during the last six hours. At the autopsy, an ulcer, with hemorrhagic appearance of base and edges, and half an inch wide, was found on the posterior wall of the pharynx, between the orifices of the Eustachian tubes. The stomach and intestines contained altered blood; the Peyerian patches were the seat of the characteristic lesions of the disease, and the peritoneal cavity contained about a pound and a half of dark fluid blood. The source of this was found in the spleen, which organ was enlarged to four times its natural size and was the seat of two long and deep lacerations or ruptures, one of them two and a half inches long and an inch deep.—*Jahrb. f. Kinderheilk.*, *IX.*, 3, 1876.

Congenital Syphilis Treated with Iodide of Iron.—Dr. Alois Monti, of Vienna, claims advantages for the treatment of congenital syphilis with the *ferrum iodatum saccharatum* (Ph. Germ.) over the ordinary treatment with mercurials. He gives it dissolved in the milk, regulating the dose according to the age of the child. Thus, three grains are divided into ten doses, of which a new-born child will receive two or three in a day, while at one year of age three grains will be given in a day, etc. It should be continued as long as any manifestations of the disease remain on the skin or mucous membranes, or there is any anæmia or enlargement of the spleen. He claims that iodism is never produced under this treatment, and that, after a few days' use of it, the child becomes more quiet, and the symptoms of the disease begin to disappear. The duration of treatment is undoubtedly somewhat longer than under mercurials, but the nutrition of the child is not impaired; on the contrary, rather improved. Of course, it cannot be substituted for mercury in the treatment of cases requiring very prompt remedies, such as specific laryngitis, accompanied by stricture of the larynx.—*Jahrb. f. Kinderheilk.*, *X.* 3, 1876.

Anti-Vivisectionists.—Despite the report of the Royal Commission, the anti-vivisectionists of England are still active in their efforts to procure the passage of a bill to suit their ends.

Borax as an Antiseptic.—The antiseptic properties of borate of soda are being discussed in France, in connection with a proposition to preserve meats and milk by its agency.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, April 15, 1876.

MEDICAL SOCIETIES AND MEDICAL REFORMS.

THE discussion of the subject of medical education during the past few years, has not been altogether barren of results. The profession has not only maintained its right to criticise the doings of the medical schools, but has succeeded in commanding a respect for its opinion. So far as ultimate reform is concerned, this beginning is encouraging. But that the time is approaching when more radical measures must be initiated, seems quite evident if we rightly interpret professional feeling upon the subject. The medical journals throughout the country have fought against the abuses in our system of medical education almost single handed, and while the majority of the reading profession endorsed the views which have been expressed, and acknowledged the necessity for change, nothing more than professional opinion has been created.

Now, however, it seems that the societies are beginning to take hold of the matter and directly use the weight of their influence and authority in preventing that greatest of all curses to medical progress in this country—the multiplication of medical schools. Every one knows how easy it is to found a medical college, create professorships, advertise the professors, and graduate students. Nothing is easier, and nothing more profitable in one way or another, to those interested in the success of the school. The obtaining a charter is a matter of form, as is also the professorial appointments, and then we have another full-fledged and portentously named college added to the already lengthy list. The ease with which these institutions can be established has been a fact so much deplored by the profession at large, that any effort calculated to remedy the evil should be duly considered and appreciated. The Allen County Medical Society, of Indiana, certainly deserves consideration in connection with its recent action regarding the prospective establishment of a medical school at Fort Wayne. The resolutions bearing upon the question are of such length, that we cannot find room for more than a few extracts; but we trust that they will be sufficient to explain the principle and spirit of the action:

Dr. G. T. Brusbach, after pointing out the acknowledged evils attendent upon a multiplication of medical schools, concluded as follows:

Whereas, Reform in this matter, in order to prove successful, must commence with the County Medical Societies; and, as it is high time that some one should lead off in the premises, and endeavor to change these things; now, therefore,

Resolved, That the Allen County Medical Society learns with deep regret of the attempt to establish another low-grade medical school in this city, and hereby enters its earnest protest against the institution of any more so-called medical colleges in the State of Indiana.

Resolved, That the Allen County Medical Society hereby desires to be distinctly and explicitly understood as withholding any and all professional recognition from the hybrid concern, which, it is generally believed, is about to be established in this city, and from its aiders and abettors.

Resolved, That the Secretary be hereby instructed to make inquiry to that effect, and report if any members of this society are in any way concerned in the establishment of the school referred to, and to furnish a list of the names of such members to this society at its next regular meeting.

Resolved, That this society recognizes the establishment of the above school simply as a means of dishonorable advertising.

Following these resolutions were some offered by Dr. Joseph R. Beck, of equal purport, but if possible more radical in their aims. Both sets of resolutions were deliberately discussed and unanimously adopted.

The principle involved is eminently correct, and we await the result of the protest with some little concern. If the success of the measure can be established as a precedent, there will indeed be great reason for the encouragement of other societies who may be inclined to follow the example.

In connection with this subject we would also refer to another instance of determination on the part of a medical society to express an opinion in regard to the continuance of another medical school. The Iowa State Medical Society has protested against the endowment of a medical department to the present State University, on the ground that under the proposed management it could never be more than a second rate school. This protest was based mainly upon the fact that clinical and didactic medicine could not be efficiently taught in a small inland town.

We believe that this is one way of correcting a growing evil, and we hope that the time is not far distant when other medical organizations shall be equally explicit in their denunciation of wrong, and equally determined in their efforts at reform.

MEDICAL ADVERTISING.

The review of medical works by the secular papers is another one of the phases of medical advertising to which a passing reference should be made. At first sight it might appear as the merest accident that a newspaper should care to devote its review space to a strictly professional work; and that it was more the result of manœuvring by some enterprising publisher than any desire on the part of the author for public notoriety. When, however, the matter is examined in all its bearings, and the usual circumstances which hang upon ordinary chances are carefully weighed, there is but one way to settle the question why some medical authors are always fortunate, and others never have a chance. Of what use is it to the general public to know, through a newspaper, that Dr. A. has written a masterly work on diphtheria, an exhaustive treatise on scarlet fever, an elaborate book upon fractures, or joint diseases, or piles, except to prove that the author is an authority on the subject, and has more than ordinary qualifications for the practice of his specialty? And what is this more than medical advertising?

This practice has been carried on so extensively in Great Britain, that the profession there are beginning to appreciate its damaging effects upon their dignity, and are clamoring, through their journals, for reform. Not only do some authors allow their works to be noticed in the manner indicated, but favor the insertion of standing advertisements in the leading secular papers. The *British Medical Journal*, which has been particularly active in exposing such dishonest proceedings, has been directly instrumental in the passage of several resolutions by the branch societies of the British Medical Association. These resolutions condemn the practice in the most unmistakable terms. The journal in question speaks thus plainly in regard to this business of special advertising:

"It is more than doubtful whether the profit to the publisher from advertising a medical treatise in newspapers repays the cost. Such books are not commonly so advertised with a view to sell copies of them to the public, but to make known their titles and the names of the authors. In a large number of cases, it is notorious that authors devote an annual sum for the mere purpose of defraying the expenses of such advertising, and subsidize their publishers for the purpose. Medical publishers act, too, very largely as the agents for authors of the books which they publish; and if the leading medical publishers were asked, they would probably say that only a small proportion of the books on their list belong to them, and that they are those which are least advertised in the daily papers."

Although very little of this kind of advertising is done in this country, there is enough of it to draw the attention of those who are interested in maintaining the honor and dignity of the profession, and in keeping it above the suspicion of underhanded practices.

Reviews and Notices of Books.

A Manual of General Pathology, for the use of Students and Practitioners of Medicine, by Ernst Wagner, M.D., Prof. of General Pathology and Pathological Anatomy in the University of Leipzig, &c. Translated from the sixth German Edition, by John Van Duyn, A.M., M.D., Prof. Anat, &c., in Medical School of Syracuse Univ., N. Y., and E. C. Seguin, M.D., Clin. Prof. of Diseases of Mind and Nervous System, College of Physicians and Surgeons, N. Y. New York: William Wood & Co., 1876. 8vo, pp. 728.

The advances which have been made in the study of pathology invest this branch with a peculiar interest to the progressive student in medicine. The home for the science at present is Germany, for there, within the past ten years more particularly, the most thorough investigations have been carried on, and the greatest progress made in the elucidation of the laws of disease, and in the interpretation of pathological lesions. The work before us is a contribution to the literature of this school, and may be said to represent the advanced views now held by the progressive investigators, and the most careful workers in this interesting and important department of our science. Originally appearing as a small volume in 1862, it was the conjoint production of Profs. Uhl and Wagner, but by the death of the former, just previous to the issue of the work, its preparation for the press devolved upon the present author, who subsequently elaborated it, in successive editions, until it has reached, in its last issue, the portentous size of an elaborate and comprehensive text-book of over 700 pages.

It would be impossible to follow the author step by step through the volume, and present his views on the different subjects of which he treats, as such a plan would involve the writing of a small treatise in itself. His aim having been to condense as much as possible, he has so successfully carried out his plan that an immense variety of subjects are crowded into a comparatively small space, with only such elaboration as would enable the reader to understand the principles enunciated, and appreciate the significance of a fact. Indeed, he has in some instances sacrificed clearness to his desire for condensation. Although it may be impossible to go through the work in detail, an idea of its merit as a text-book for the student, and as a guide to the general practitioner, can be obtained by some statement in regard to the arrangement and subdivision of its component parts.

Before proceeding further, it is quite necessary to understand that general pathology, properly so called, embraces a very wide range of study, and comprises a thorough knowledge of everything pertaining to the morbid state, and to disease in general, whether it be in its nosological, etiological, pathological, physiological, or chemico-pathological relations. It may, in a word, be considered as the fundamental science of medicine proper, by a knowledge of which we are enabled to examine into the causes, effects, and treatment of disease.

When such a multitude of subjects is to be considered as will guarantee a reasonable completeness to the whole, it becomes a matter of more than ordinary concern with the student as to the system which the author may follow, and the skill with which he may classify. In the latter respect, Prof. Wagner has been successful, and has fulfilled all the conditions necessary to make the work, not only a very complete one, but a very available and systematic one for reference.

The reader is carried from the beginning to the end by an easy and natural method, and is enabled to appreciate the significance of each new fact, and the application of each new principle as he proceeds. General nosology, for instance, is the first subject presented, comprising a discussion of the nature and extension of disease, general symptomatology and diagnosis, general prognosis, course and duration of disease, and its termination in cure or death. Next follows general etiology, comprising the usual predisposing and exciting causes of disease, internal and external; those pertaining to the individual and to outside influences; and their general pathology, anatomy, and physiology, in its relations to the local disturbances of the circulation, to inflammation, and to the general disturbances of nutrition, in the shape of atrophy, hypertrophy, and the abnormal metamorphosis of tissue. In the latter, we may say in passing, are considered the formation and structures of the different morbid growths which are classified under the head of tumors.

The pathology of the blood next follows, under which heading the anomalies in structure of blood corpuscles, their deterioration, positive and relative, and the different hematic conditions which are associated with the different affections known as blood diseases are presented. Any one who has not studied general pathology in the comprehensive manner of its treatment by the author, will be astonished at the amount of useful information contained in the work, and will be gratified in finding such a thorough *résumé* of the fundamental elements of medicine.

The editors have done their work well under the circumstances. The style of English is not Addisonian, it is true, and a great many Germanisms have crept into the text; but by comparing the translation with the original, we are willing to make every allowance. Prof. Wagner has a style which is peculiar. He deals in parenthetic and involved sentences, and sacrifices everything else, in the expression of an idea, to brevity. The only fault with the translators has been, that they have followed him too literally, and have destroyed much of the beauty and smoothness of a freer rendering.

THE MEDICAL JURISPRUDENCE OF INSANITY, by J. H. BALFOUR BROWNE, Esq., of the Middle Temple, and Midland Circuit, Barrister-at-Law, &c. (London, Eng.) Second Edition, with reference to the Scotch and American decisions. Phila.: Lindsay & Blakiston, 1876. 8vo, pp. 713.

WHEN this work first appeared, in 1871, it was welcomed by the medical and legal world as one of the most valuable contributions to the medical jurisprudence of insanity in our language.

Since that time it has maintained its reputation, and has been studied with satisfaction by every one interested in the medico-legal inquiries bearing upon diseased conditions of the mind. A second edition comes to us, with additions and alterations, which render the work even more valuable, easier of reference, and more comprehensive in detail. Written by a barrister, the foundation of the treatment of the subject rests upon the legal responsibilities of the different varieties of insanity; but in order that such responsibilities should be clearly appreciated, a very careful analysis of the cases from a strictly medical point is made. Intended for both attorney and physician, it supplies the wants of each, and is a bond of mutual support to a strictly scientific opinion. The style of composition is admirable in terseness, and classic in the interest which it evokes on the subject, while the vast number of illustrative and curious examples of disease gives it a value which is peculiar to itself.

A TREATISE ON SURGERY, ITS PRINCIPLES AND PRACTICE. By T. HOLMES, M.A., Cantab., Surgeon to St. George's Hospital. Philadelphia: Henry C. Lea, 1876.

THIS is a work which has been looked for on both sides of the Atlantic with much interest; and the prompt appearance of the Philadelphia reprint is an indication of the estimation in which the author is held. Mr. Holmes is a surgeon of large and varied experience, and one of the best known, and, perhaps, the most brilliant writer upon surgical subjects in England. In his preface to this work he speaks of it as "to some extent an introduction" to the System of Surgery edited by him; and while that may be true of it in the way that an outline sketch would be an introduction to the completed picture, the expression does not do justice to the work. Books upon surgery may be classified as encyclopædical, clinical, and manuals, or text-books, each of which has its distinct field; although, of course, much of the same material is to be found in all. This book belongs in the third group, and its use is distinctly limited by the very qualifications which fit it for its place. It is a book for students—and an admirable one—and for the busy general practitioner. It will give a student all the knowledge needed to pass a rigid examination, but it will not give him all the details he will want to know, when he finds himself face to face with an important surgical case; those he will have to get from other books, or by experience.

It may well be doubted if work of this kind might not better be left to other hands. Mr. Holmes says that no man without a "personal experience of the various exigencies of surgery" should attempt to write such a book; but his own work shows evidence of the insufficiency of this argument. The experience of no man, especially in these days of specialism, covers all the topics, and the writer is tempted to give undue prominence to those with which he is best acquainted, so that many bare spots must be left. A text-book is a compilation, and its preparation belongs to that class of work which falls naturally to the part of young men of limited experience and abundant leisure:—those who supply the innumerable journal and dictionary articles, and who have sufficient knowledge, training, and experience to be able to compile intelligently. Men like Mr. Holmes would find a better and more useful field in the one in which he has already done so much that is valuable. Their work should be original, encyclopædical in fulness, or clinical in character.

It is impossible, within the space at our disposal, to enter into a detailed criticism of this book. It is an ungracious act to seek only for the defects; and where there is so much to praise, it is impossible to specify. The book fairly justifies the high expectations that were formed of it. Its style is clear and forcible, even brilliant at times, and the conciseness needed to bring it within its present limits has not impaired its force

and distinctness. It is profusely illustrated, but then many of the illustrations are worthless. The author's praiseworthy attempt to give drawings of the specimens in the pathological museums, has failed utterly in many cases. This apparently is not due to carelessness in making the drawings or wood-cuts, but to the inherent difficulties of the subject. Few specimens even can be understood without being handled and studied; how impossible then it must be to make a drawing which will convey a just idea of one. This failure is doubly unfortunate, because the space occupied so unprofitably has been gained by very close pruning of the text in many places.

From the American point of view, there are two subjects which deserve criticism. Mr. Holmes has not done full justice to that treatment of fracture of the thigh which is identified with the name of Dr. Buck. He does not seem to be practically familiar with the method of treatment, or with the record of its results.

In this connection, we may say that he has preserved the traditional distinction between the provisional and the permanent callus, a distinction which is not justified by pathological anatomy; and that he still classifies fractures of the neck of the femur as intra- and extra-capsular, and devotes a page and a half to their diagnosis—a diagnosis which can never be more than probable, and which has no practical value as regards either prognosis or treatment.

The second point is the treatment of stricture. He makes no mention of the use of a tunnelled instrument over a guide, and recommends treatment by tying in catheters; and in his directions for tying in, he tells us to pass the strings through the rings on the end of the catheter; and then, lest there should be any mistake as to his meaning, he adds (p. 790) that "the difference between a silver and a soft catheter, as regards their suitability for tying in, is certainly not very great." Such treatment is absolutely condemned by American authorities, as well as by many English and French. The latter tie in soft catheters occasionally when the difficulties of catheterisation are very great, as in cases of enlarged prostate, but they always do it under protest; and in the treatment of stricture the representative surgeons never leave a bougie in place for more than 15 minutes. Our American authorities go still further, and claim (Van Buren and Keyes) that the simple entrance and immediate withdrawal of a metal sound procures the best results.

Urethral fever, so common and so redoubtable an accident, is mentioned only in a foot-note (p. 795) as a name given to "distressing rigors," accompanied by a rise of temperature and great malaise. There is something wrong in the perspective of a writer who gives half a page to an instance of death following the removal of a small wen, and does not mention the possibility that division of a stricture, or even catheterisation, may have a fatal result.

The chapters on diseases of the joints and of the bones, are admirable; that on minor and operative surgery contains much that is very useful; the article on Lister's antiseptic dressing is a judicious departure from the general economy of space; and although we have felt compelled to criticise some points, we cannot close the book without saying that it is the best and most complete surgical text-book in our language.

The publisher's part has been well done. The illustrations have been skilfully copied, the text is clear and distinct. It is to be regretted that the marginal index of the original has been suppressed in the reprint.

Transactions of the Twenty-fifth Anniversary Meeting of the Illinois State Medical Society for 1875. Chicago: Fergus Printing Co., 244–248 Illinois St.

The volume is bound in cloth, and reflects credit both upon the Society and the publishers. It is made up largely of reports upon different branches, such as surgery, practical medicine, etc., and while reading them we became not only interested but fully convinced that the Western as well as the Eastern doctors disagree. To some of these papers, however, the remark made by one of the thoughtful members of the Society can with fairness be applied, namely, that they are "bare recitals of points of progress which is so faithfully done in certain of our journals and year books, or accompanied with loose and practically valueless comments on the same, that they should not burden the pages of the Transactions." In the report upon "Shortening in Fractures," Prof. Sayre, of New York, has a sharp rejoinder to the doctrine which he advanced at the annual meeting of the American Medical Association, held in Detroit in 1874. We incline to the opinion that the rejoinder would be endorsed by the great mass of the profession were its circulation equally extensive. The author of the report believes that some shortening almost invariably occurs, without regard to the plan of treatment adopted, and upon this point we think he is sound.

Transactons of the American Otological Society. Eighth Annual Meeting, Newport, R. I., July 21st, 1875. Vol. 2, Part 1. 98 pp. 8vo. Boston: James Campbell.

The publishing committee are to be congratulated on the promptness with which their task has been fulfilled. With a little more attention to proof-reading a few errors would have been eliminated. Thus in the list of officers for the ensuing year the name of Dr. C. H. Bennett is printed in place of Dr. C. H. Burnett. Other mistakes occur on pages 58 and 60.

The report on the Progress of Otology for the past year is divided into two portions, Dr. C. J. Blake having prepared Part 1st, which includes the anatomy and physiology, and Dr. A. Mathewson Part 2d, including pathology and therapeutics. These gentlemen have been fairly successful in their efforts.

Among the interesting papers contributed is one by Dr. A. H. Buck, on the method of using medicated Eustachian bougies. Nitrate of silver solution, of the strength of 20–40 grs. to the ounce, is the remedy he generally applies in this manner. A fine whalebone or cat-gut bougie, with a bit of cotton twisted about one end, is dipped in the solution and passed through the catheter, and so on into the Eustachian tube. This method is a very safe one, for the skill requisite in the manipulation will necessarily confine its employment to the hands of the experienced otologist.

Dr. Clarence J. Blake communicates some very instructive investigations on the intra-tympanic pressure during phonation, observed in a patient with purulent inflammation of the middle ear.

Two Thousand Years After; or, A Talk in a Cemetery. By John Darby. Claxton, Remsen & Haffelfinger, Phila. 1876. Pp. 103.

The plan of this little book is to have Socrates and his friends resume the discussion recorded in the Phædo two thousand years ago. The subject of discussion now is found in the positivist and materialistic doctrines, the errors of which the author tries to show with simple language and illustrations. The form of dia

logue which has been preserved is well adapted to a subject in treating which frequent explanations are necessary.

Reports of Societies.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, April 7th, 1876.

DR. D. B. ST. JOHN ROOSA, VICE-PRESIDENT, IN THE CHAIR.

REPORT ON GYNÆCOLOGY.

DR. P. F. MUNDÉ read the annual report, in which attention was directed to the following subjects:

THE PHYSIOLOGY OF OVULATION AND MENSTRUATION.

Considerable space was devoted to the consideration of this question, and a large number of authorities quoted in support of the theories advanced respecting the relationship between these two functions. There were those who held that ovulation and menstruation were independent functions, and that the proof of such relation existed in the facts mainly that conception has occurred in non-menstruating women; that menstruation has taken place after the removal of both ovaries; and that evidence of ruptured Graafian follicle was not always found subsequent to menstruation.

Dr. Mundé, however, did not accept this doctrine, and placed himself with those who believed that menstruation is an accompaniment of ovulation, according to the old theory.

With reference to the changes which take place in the uterine mucous membrane at the time of menstruation, extensive reference was made to the writings of Williams and Engelmann. Williams holds that there is monthly shedding of the uterine mucosa, and that this takes place by way of a molecular disintegration of the mucous membrane of the uterus, which is followed by a hemorrhage; Engelmann believes that during the menstrual period, the uterine mucous membrane becomes swollen, but that the tumefaction is limited to the superficial layers, and with it is associated an enlargement of the blood-vessels, and consequent engorgement with blood. After a certain degree of tumefaction has occurred the superficial layer of the membrane undergoes a moderate degree of fatty degeneration, and gives rise to hemorrhage. After the cessation of the hemorrhage, the tumefaction gradually subsides and disappears.

Dr. Munde inclined to the support of Engelmann, and did not believe that the monthly shedding of uterine mucosa was a desquamation.

Referring to the

CAUSES OF MENSTRUATION,

the theory was mentioned that its cause is neither in the ovaries, the uterus, or the blood, but that it is probably in the ganglionic nervous system, and that the reason why it declared itself through the circulation was because the circulation was under control of that system.

INTRA-UTERINE APPLICATIONS.

The practical suggestion was mentioned in connection with this topic, that they should be used after, rather than just before, the occurrence of menstruation.

EARLY ABORTIONS.

Here reference was made to the theory advanced, that many cases of dysmenorrhœa in otherwise healthy sterile women were cases of repeated conception and abortion that passed unsuspected by either patient or physician. In such case the most common time for the occurrence of abortion would be at the end of four weeks instead of three months. If true, it established the importance of both macroscopic and microscopic examination in every case of dysmenorrhœa to determine the presence or absence of the decidua of conception. The treatment suggested was, quiet in bed, counter-irritation to the inner surface of the thighs, and opium preceding the time of anticipated menstruation.

EXPLORATIVE PUNCTURE OF OVARIAN CYSTS.

The doctrine taught was, that such explorative punctures, with the hypodermic needle, or the needle of an aspirator, should not be resorted to unless indispensably necessary to a diagnosis. The danger was subsequent peritonitis. Dr. Peaslee was referred to as authority for the statement that the needle of the aspirator should not be regarded as any safer than a trocar and canula, and that recourse should not be had to either unless everything was ready for the performance of the radical operation within twenty-four hours. Under the head of

OVARIAN THERAPEUTICS,

it was said that the idea had been advanced that ovariotomy might become obsolete, for the reason that a radical cure of ovarian cysts by means of electrolysis had been reported. Whether that method of treatment would stand the test of time, remained to be seen.

POSTURE OF THE BODY AS A CAUSE AND A CURE FOR UTERINE DISEASE.

It has been held that the erect, the sitting, the kneeling, the reclining, and the recumbent positions are all proper if properly employed, and not persisted in too long. For example, the erect position should be maintained only for a short time, unless the body was kept in motion; sitting in a chair so high that the feet cannot find firm support upon the floor, was improper; the recumbent posture should be upon a level plane, either soft or hard, etc., etc. The posture treatment in overcoming displacements of the uterus has been advocated, and instruments devised for facilitating the entrance of air into the vagina to assist—for example, in reproducing a retroverted uterus; the woman, meantime, favoring its return by placing herself in the knee-breast position.

TREATMENT OF UTERINE FIBROIDS.

Meadows has claimed that these tumors can be influenced by the administration of the chloride of calcium and ergot; but that any benefit may attend their use, both remedies must be given perseveringly for months.

Byford has answered the question in the affirmative, concerning the cure of uterine fibroids by the use of ergot.

GASTRO-HYSTEROTOMY.

Within the last year nine cases of this operation have been performed, and of these six recovered. Billroth, after several unsuccessful operations, has finally come to recommend it as justifiable, having succeeded in one of his own cases.

BILATERAL DIVISION OF THE CERVIX UTERI IN DYSMENORRHŒA.

Bilateral division of the cervix has been performed for the relief of dysmenorrhœa depending upon conoidal cervix, flexion, and constriction of the external os; but the results have been so unsatisfactory, that it has become questionable whether the operation should be continued.

INTERMITTENT APPEARANCE OF A FIBROUS POLYPUS.

A case had been reported where a polypus appeared at times in the os uteri, and then retreated altogether beyond sight. The explanation was, that at the menstrual epoch hyperæmia took place, the tumor increased in size, pains followed, and as a result of such uterine pains the polypus made its appearance. One condition was regarded as necessary to the development of the phenomenon, and that was sufficient vascularity of the tumor. With regard to operating for the removal of such polypi, it was thought better to operate during menstruation, because less dangerous, than to wait until the hyperæmia had passed away and the mouth of the uterine had become closed, thus requiring the use of the sponge-tent, etc., to gain admission to the uterine cavity so as to reach the polypus.

LOCAL APPLICATION OF STRONG NITRIC ACID IN THE TREATMENT OF UTERINE DISEASES.

Dr. Mundé was of the opinion that the local use of strong nitric acid in the treatment of such diseases as endometritis, menorrhagia, endo-cervicitis, etc., had not met with the encouragement which it deserved. He recommended its thorough application to the internal surface of the uterus, after dilatation of the cervix—for example, in a case of obstinate follicular degeneration of the uterine mucous membrane.

TREATMENT OF GONORRHŒA IN THE FEMALE.

Dr. Palmer had recommended that the patient be placed in the knee-elbow position, air be allowed to distend the vaginal canal, the vagina be thoroughly cleansed, and after the water has been allowed to escape, refilled with a solution of sulphate of zinc of the strength of a table-spoonful to the half-pint of water. Repeated daily, and a complete cure might be expected within a week or ten days.

Attention was called to the fact that vaginal syringes should never have a central opening, for, with a hole in the centre of the tube, there was liability of exciting unpleasant, and, it may be, serious symptoms, especially in cases of wide cervix, ruptured cervix, or a cervix left open by operation, because of the injection of water into the uterine cavity. For that reason the fountain syringe was prefered.

PECULIAR PSYCHICAL CONDITION DEVELOPED BY ETHER AND CHLOROFORM.

Females were said to be specially liable to experience the sensation of sexual congress, or that their persons were being violated, when passing under the influence of ether and chloroform; hence, the precaution should be taken, never to attempt to bring them under the influence of these anæsthetics without having a third person present.

CYSTITIS IN THE FEMALE CURED BY DILATATION OF THE NECK OF THE BLADDER.

Dr. Howe had reported several cures of cystitis in the female, effected by manual dilatation of the urethra. Dr. Noeggerath had reported his success in exploring the pelvic organs through a dilated female urethra. Simon had laid down the rule that the female urethra might be dilated to eight-tenths of an inch in diameter without injury; and had also performed catheterization of the ureters in connection with such dilatation.

Dr. Munde's report was listened to with attention, and, being open for discussion.

Dr. J. C. Peters mentioned a case of uterine polypus which appeared at stated intervals, and then retreated, and was treated by a homœopathic physician with high dilutions, on the supposition that the woman had been relieved of a large number of these polypi, as the direct effect of taking the medicine.

The polypus was subsequently removed by Dr. Peaslee.

Dr. A. A. Smith reported a case in which dilatation of the urethra was effected in a girl 8 years of age, sufficient to readily admit his index finger, probably three-fourths of an inch in diameter. Palmer's instrument was employed. The dilatation was for the removal of a calculus, and the girl made a good recovery.

Correspondence.

DAWSON'S *versus* PIFFARD'S GALVANO-CAUSTIC BATTERY.

To the Editor of The Medical Record.

My Dear Doctor:—Will you allow me to correct some errors in the report of the meeting of the Medical Journal Association of March 10th, in The Record of the 25th March, page 201: at which meeting Dr. Piffard read a paper entitled "The Proper Construction of Galvano-Cautery Apparatus"?

The report says, in third paragraph from the top of page 202, "Dawson's battery has two negatives, *i. e.* one platinum plate and four zincs, to each cell. . . . . The platinum plates in Dr. Dawson's battery were somewhat larger than those of Dr. Piffard's." The sized battery which I have offered to the profession has but one negative, and two zincs, or positive plates, to each cell; for I found by experimenting, that plates of a certain size, and of such a combination, were of sufficient power for all practical purposes. As to my platinum plates being larger than Dr. Piffard's, *they are not*, and, I believe if accurately measured, would be found to contain less platinum by weight. Dr. Piffard used platinum plates $6\frac{1}{2} \times 4\frac{1}{2}$, while I use platinum $5\frac{1}{2} \times 4\frac{1}{4}$. Again, in the succeeding paragraph, the report says: "The quantity of fluid required by Dr. Piffard's battery was somewhat less than that required by Dr. Dawson's." This also is an error, for both Dr. Piffard and myself stated that each battery held a little less than a quart of fluid. In paragraphs ten and eleven your report also says that I exhibited a battery which "Dr. Piffard allowed was more powerful than the one he had devised, but was not the apparatus I had placed upon the market," and that I "admitted it was not the instrument upon the market bearing my name." The battery referred to was in every respect one of my batteries, and as much entitled to bear my name as will any other. It was simply more powerful than the one Dr. Piffard calls my "commercial" battery, from its having an additional negative and positive plate to each cell, which addition was made expressly to show Dr. Piffard that if I used the same number of plates to each cell that

he found necessary in the one he exhibited, *in conjunction with the other special advantages I claim* for my battery, I obtained a battery which he acknowledged was more powerful than his. *The number of plates* in each cell of my battery, if the measured size of the apparatus is not thereby increased, has nothing to do with the special characteristics of construction I claim as original. Dr. Piffard certainly will not admit that the addition of extra plates to a given sized battery entitles it to a new name. By uniting two similar batteries (as, for instance, two of my own), one will get double the amount of power, but cannot claim the possession of a *new kind of battery*.'

Very truly yours,

B. F. Dawson, M.D.

TREATMENT OF FRACTURE OF CLAVICLE.

To the Editor of The Medical Record.

Dear Sir:—The article on the treatment of fractured clavicle, by Dr. F. Staples, in No. 282 of The Medical Record, causes me to ask the insertion of the following note, which I added to the chapter on Fractures of Clavicle, in my German translation of Dr. F. H. Hamilton's book on Fractures and Dislocations:

"The late Dr. E. Krackowizer devised an apparatus for the purpose of holding the shoulders back in this fracture, which he intended using whenever he should attend a case of fractured clavicle, where the patient should think it of importance to avoid all deformity. A metallic padded belt is fastened around the waist; from its anterior middle arises a metallic rod, running upwards along the sternum, at a little distance from the thoracic walls, until, on a line with the shoulder-joints, it divides into two lateral branches, which extend to the axilla on either side, where they again terminate in two vertical branches, so curved as to grasp the shoulders, and push them back by the turning of a screw. The patient must lie on the back during the entire course of treatment. Dr. Krackowizer preferred this contrivance to Heister's cross, as, in his opinion, it required less pressure upon the shoulders than in either Heister's or any other kind of back splint." Respectfully,

A. Rose, M.D.

265 Seventh Street.

TWO COURSES IN THE SAME YEAR.

AN ANSWER FROM THE ATLANTA MEDICAL COLLEGE.

To the Editor of The Medical Record.

Dear Sir:—In your editorial of April 1st, you quote from the *American Medical Weekly*, of Louisville, to the effect, that the Atlanta Medical College gives, or has given, two courses of lectures in the same year. Dr. Gaillard, of the *Weekly*, seems to have made the statement in justification of his own school. The statement needs correction.

The lectures of the Atlanta Medical College, from its organization till the past five years, were given in the summer—there being then no winter session. The exercises were suspended during the war. It was found impossible to resume in the summer immediately following the close of the war, the college building having been used as a hospital by both armies, and entirely despoiled of its equipments. Hence, the session of that year was necessarily postponed till winter. The next summer the regular schedule was resumed. This is the only ground on which Dr. Gaillard can possibly base his statement. You will perceive the injustice of it.

I would further state, that in 1871, the course was permanently changed from summer to winter. There was no course from the summer of that year to the winter of 1872 and 1873. Observe the interval of eighteen (18) months. One winter was omitted, that we might *avoid* the holding of two graduating courses in one year.

Please do us the justice of correction, by publishing this note.

Very respectfully,

J. T. Johnson, M.D., *Dean.*

Atlanta *April* 7, 1876.

BLEPHARO-ADENITIS WITH FISTULÆ.

To the Editor of The Medical Record.

Sir:—I attempt to describe the above disease, in connection with two cases which I have seen lately in Dr. Agnew's clinic, at the Manhattan Eye and Ear Hospital. I have seen no work on diseases of the eye in which this trouble is mentioned.

L. B., age 21, has had lid trouble for six months; has had no treatment beyond household remedies. On everting upper lids, bodies appearing at first glance to be trachomatous are visible. Looking more closely, the centres of these bodies are found to be depressed. These depressions are surrounded by rosettes of minute granulations. Taking a small probe and inserting it into an umbilicated centre, it was found to lead into a sinus connected with a Meibomian follicle. Some of these openings were as far back as the superior edge of the tarsal cartilage, each upper lid having (6) six or (7) seven on it.

One week later, E. L., age 30, presents herself with the same trouble. Both patients had chalazion of both upper lids. They no doubt had had a series of chalazion, that had opened themselves on the surface of the palpebral conjunctiva, these openings resulting in fistulæ.

The treatment to be pursued here is the same as that for fistula in other parts of the body, either by slitting up or cauterization. These were healed by applications of nitric acid to as much of fistulæ as could be reached. First patient, after two applications, returns greatly improved.

W. Cheatham, M.D.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from April 2nd to April 8th, 1876.

McCormick, Chas., Surgeon.—To proceed to New York City, and, on arrival, report by letter to the Surgeon-General. S. O. 65, A. G. O., March 31, 1876.

Bentley, E., Assistant Surgeon.—Assigned to duty at Camp Independence, Cal. S. O. 25, Department of California, March 18, 1876.

Fitzgerald, J. A., Assistant Surgeon.—When relieved by Assistant Surgeon Ainsworth, to report in person at these Headquarters for assignment to duty. S. O. 31, Department of the Columbia, March 24, 1876.

Ainsworth, F. C., Assistant Surgeon.—Assigned to duty as Post-Surgeon at Sitka, Alaska. S. O. 31, C. S. Department of the Columbia.

Comegys, E. T., Assistant Surgeon.—Assigned to duty at Plattsburg Barracks, N. Y. S. O. 58, Military Division of the Atlantic, April 4, 1876.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending April 8th, 1876. Walter De F. Day,
Sanitary Superintendent.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
April 1st.....	0	4	76	5	65	71	26
April 8th.....	0	7	91	4	59	100	40

Success in Practice.—Dr. Wm. B Davis, of Cincinnati, in an address delivered to the graduating class of the Miami Medical College, gives some of the statistics of the medical profession of Cincinnati, by which it is shown that of all who entered the profession during the past 25 years, three-fourths failed. It is also shown that, of the physicians of Cincinnati who were "*resident physicians*" of the Cincinnati Hospital, all succeeded.

University of Pennsylvania, Medical Department.—The Medical Department of the University of Pennsylvania has for a long time entertained the idea of lengthening the period of medical study and grading the course accordingly. As a commencement in this direction, the trustees have elected four gentlemen from the staff of the University Hospital as members of the Faculty, creating the four extra chairs to which these gentlemen are to be attached. The appointments are as follows: Morbid Anatomy and Pathology, James Tyson, M.D.; Clinical Surgery, John Neill, M.D.; Clinical Medicine, William Pepper, M.D.; and Diseases of Women and Children, William Godell, M.D. The other members of the hospital staff—Drs. Wood, Norris, Strawbridge, and Duhring—retain simply their former positions, being specialists. The newly-elected professors will receive no emolument until an endowment fund is raised, and the position and titular honors of the other professors are to remain unchanged.

Professor of Hygiene at Netley.—The professorship of Hygiene at the Army Medical School at Netley, now vacant by the death of Prof. Parkes, is worth £1,000 per annum.

The British Army Medical Staff Bill, now known as the short service scheme, is not likely to become a law. There is the strongest kind of opposition to it by the medical press and the profession generally.

Scarlet Fever.—Several schools in England have been closed in consequence of the prevalence of scarlet fever.

Medical Advertising.—The subject of medical advertising is attracting the attention of our British cousins. On the whole they take very strenuous grounds. Not only do they object to the advertising of medical colleges in the daily papers, but to the announcement of medical works and their review in the secular prints.

Medical Centennial.—Among other distinguished men to visit America at the time of the Centennial, will be Prof. Lebert, University of Breslau; Prof. Jaccoud, of Paris, and Stromeyer, of Hanover.

Bellevue Hospital Medical College.—At a recent meeting of the Faculty of Bellevue Hospital Medical College, Dr. A. A. Smith was elected Lecturer Adjunct to the Chair of Clinical Medicine, and Dr. L. M. Yale, Lecturer Adjunct to the Chair of Orthopædic Surgery.

School Children and Dangerous Communicable Diseases.—Dr. Arthur H. Nichols, in a recent number of the *Boston Medical Journal* (Mar. 23), contributes a very sensible article upon the above subject, from which we extract the following recommendations:

"Considering, however, that it is the imperative duty of the school authorities to adopt the most stringent measures designed to interpose a check to the unlimited spread of these diseases, I would venture to suggest some such rules as the following, as best calculated to meet the end proposed: –

I. No pupil shall be allowed to attend school from any house in which small-pox, varioloid, or scarlet fever is prevalent.

II. A pupil who has been affected with small-pox, varioloid, measles, or scarlet fever, shall not be permitted to return to school until, desquamation having ceased and convalescence being complete, the surface of the body shall have been finally disinfected by means of warm baths (with abundant soap), applied upon four successive days, or until no trace of roughness of the skin remains. The pupil, furthermore, shall not be allowed to reënter school until the teacher shall have received satisfactory evidence that all clothing worn by the patient has been thoroughly disinfected, and that the sick-room and its contents have been properly cleansed. If the teacher is not satisfied that all practicable disinfection has been effected in the case of any pupil, said pupil shall not be re admitted until three weeks shall have elapsed from the beginning of convalescence.

III. No pupil shall be allowed to attend school who is affected with diphtheria or whooping-cough.

Both parents and instructors should be informed as to the measures requisite for the disinfection of the clothing, sick-chamber, etc.* They should also be made to appreciate that a neglect of these precautions, when children are allowed to return to school after slight cases, forms often a principal source of epidemic infection.

It is hardly necessary to add that, under the supervision of a qualified medical inspector, to whom all obscure or doubtful points might be referred, a much more intelligent and judicious enforcement of these rules might be expected."

Weekly Bulletin of Medical Societies.

Monday, April 17.—Obstetric Section of Academy of Medicine; N. Y. Society of Neurology and Electrology; Pathological Society of Brooklyn.

Tuesday, April 18.—N. Y. Obstetrical Society; N. Y. Dermatological Society; Medical Society of Kings Co.

Thursday, April 20.—N. Y. Academy of Medicine.

Friday, April 21.—Medical Journal Association.

*See Manual of Public Health, edited by Ernest Hart, page 266.

Original Communications.

HINTS TO PRACTISING PHYSICIANS REGARDING CORONERS' INQUESTS.

BEING A PAPER READ BEFORE THE YORKVILLE MEDICAL ASSOCIATION, N. Y., MARCH 14, 1876.

By WOOSTER BEACH, M.D.,

NEW YORK.

The duties of coroner in this city are not very clearly defined by statute; and, even with the aid of legal precedents and of common law, his prerogatives cannot very definitely be determined. The officer in England has unusual powers, and is directly responsible to the king. His intimate relation with the crown suggests his title. "Crowner's quest law" has been a favorite topic with writers, both old and new, but they usually treat it in a style not particularly grateful to the feelings of the important functionary administering the law. Even the immortal bard, in several of his plays, has taken numerous liberties with the dignity of the office. So perhaps the coroner of to-day may comfort himself with the reflection that the strictures of his numerous critics are rather the result of an old, time-honored custom than of any just cause of complaint against him.

The statutes of 1871, relating to the coroners of the city and county of New York, is about the only law of interest to our practising physicians bearing upon this subject. Section one of that law provides that "Hereafter, when in the city and county of New York any person shall die from criminal violence, or by a casualty, or suddenly, when in apparent health, or when unattended by a physician, or in prison, or in any suspicious or unusual manner, the coroner shall subpœna a properly qualified physician, who shall view the body of such deceased person externally, or make an autopsy thereon, as may be required. The testimony of such physician and that of any other witnesses that the coroner may find necessary, shall constitute an inquest. For making such external examination the physician shall receive three dollars, for making such autopsy he shall receive ten dollars, and such sums shall be a county charge and be paid by the Board of Supervisors.

Section I. provides that the coroner may dispense with a jury in certain cases.

Section III. says: "It shall be the duty of any citizen who may become aware of the death of a person who shall have died in the manner stated in Section I. of this act, to report such death forthwith to one of the coroners, or to any police officer; and such police officer shall, without delay, notify the coroner of such death; and any person who shall wilfully neglect or refuse to report such death to the coroner shall upon conviction be adjudged guilty of misdemeanor, and shall be punished by imprisonment in the county prison not exceeding one year, or by a fine not exceeding five hundred dollars, or by both such fine and imprisonment."

Section IV. provides that "Any person except the coroner who shall wilfully touch, remove, or disturb the body of any one who shall have died in the manner described in Section I. of this act, or shall wilfully touch, remove, or disturb the clothing or any article upon or near such body, shall upon conviction be adjudged guilty of misdemeanor," &c.

The coroner has the power in holding inquests to summon and compel the attendance of medical as well as other witnesses. The physician is obliged to give his testimony at the inquest, as in other courts of justice. The coroner has no means of enforcing an order for a post-mortem examination, and before the law of 1871 he could not even promise payment for such service. The practice in this city is for each coroner—there being four—to choose a physician who accompanies him on his rounds, and makes all the external and post-mortem examinations as required by the above law, and also attends to the clerical duties of the inquest, an arrangement which, under the present system of choosing the coroners, is as good as any other. This physician is usually known as *deputy coroner*, but the law recognizes no such office. In fact, it expressly states that the coroner shall delegate none of his powers to another.

The physician in this city, therefore, that has charge of a patient who may become the subject of an inquest, does not usually make the post-mortem examination connected therewith. Should he desire to do so, it has been the custom to extend that privilege to him; or should he prefer, he may simply be present and witness it. Physicians in very many instances do not avail themselves of this privilege. The reason may be in some cases, that they are not aware of their right to be present, or in others that they absent themselves from fear of being called as a witness in the case; or perhaps they will not subject themselves to the inconvenience of attending the inquest. In any case, it seems to me, that in their failure to be present, they omit an important duty both to themselves and to the cause of justice. It is true that, for the latter reason, the coroner should endeavor to have the physician take part in the autopsy; but his omission to do so does not lessen the obligation of the latter to be present. The proper plan, when he has a coroner's case, would be, as soon as possible after the death of his patient, for him to visit the coroner's office, where he could make full arrangements for the post-mortem examination with the clerk, or with the doctor in whose hands the case might fall. His presence at the autopsy would not probably increase his liability to witness duty, either before the coroner or in the trial that follows; but if it did become necessary for him to testify, how much better he could acquit himself if he had the advantage of the knowledge obtained from the inspection of the dead body.

In all cases in which a patient may die from causes requiring judicial investigation, I would suggest that careful notes be taken, not only of the medical treatment, but of the surroundings, the persons present at the various visits, and of such other points as would recall the case perfectly to mind. Should the patient be wounded and the clothes still on, they should be carefully examined for cuts, bullet wounds, or other marks; and the entire surface of the body ought, if possible, to be looked over for bruises, scratches, discolorations or wounds, and their position and appearance noted. The necessity of observing apparently unimportant points is frequently shown on trials where a most creditable direct-examination of a medical witness has been made to appear entitled to doubt, from the cross-examination bringing out the fact that objects and circumstances noticed and testified to by others were not known to him; making it appear to the jury that if his observation of things in general was deficient, a like deficiency would probably be expected in matters relating to his patient.

Measurements of wounds, their direction, extent, and various peculiarities that may be expected to re-

main unchanged till after death, I do not propose to touch upon. Their proper consideration would consume far more time than could be given to a paper of this character. At present, I merely propose to direct attention to the duties required in a class of cases liable to fall to the lot of any practising physician, and my limits will scarcely more than allow an allusion to them. The study of post-mortem appearances, as treated upon in the works on medical jurisprudence, is an interesting one. Although it may be of no direct practical use to doctors in general, it will teach them a proper method of observation, when such observation may become necessary. Of American works on the subject, Beck's, though old, is good, but that of Wharton and Stillé is more modern and better adapted to the present time. Of the English authors probably the most comprehensive, although quite concise, is Taylor. Guy is also to be recommended.

Patients who may become ill soon after receiving kicks, blows, or other injuries, and die, are often the cause of trouble to the physician. The friends naturally ascribe death to the violence received; and it requires some tact on the doctor's part, in cases where he positively knows such illness to be independent of the injury, to convince the friends of their error. In all cases of this kind, where there is a chance that any disaffected person may revive and publish their suspicions at a future time, it would be proper to turn the case over to the coroner, or at any rate to insist on a post-mortem examination being made. Rather sudden deaths sometimes give rise to suspicion of poisoning among the attendants or friends of a patient. The same course should be pursued in this, as above suggested.

Should the doctor really feel that he had grounds for suspicion, he should observe the same precautions in regard to carefully taking notes as before spoken of. If vomiting occur in such cases, the matter ejected ought to be collected and preserved, if possible, in *new* vessels, sealed and put away where it could by no chance be disturbed. In any case where a physician is called as a witness, all his testimony will carry much greater weight if it is shown that he has used especial care in everything that he has done, even if what he did availed nothing directly in elucidating the case.

There is probably no class of cases that may engage the attention of a physician in this city that requires greater judgment and care on his part than those resulting from criminal abortion. I believe the fact to be well established, that not unfrequently women subject themselves to an operation by some professional abortionist, and when the resulting miscarriage follows, call in their family physician to attend them. I would not assert that the doctor *knows* the cause of the abortion in these cases, but are there not instances where no steps are taken by him to confirm his well-founded suspicion? Perhaps he rather avoids inquiries tending to make the matter too clear, and compel him to solicit a proper investigation. I would not insult my professional brethren by doubting that they would pursue such a course, when they had unmistakable proof that a crime of this character had been committed; but does the medical man do his duty when he omits the slightest opportunity to suppress this vile crime? But I find myself diverging from the proper scope of this paper—it is only cases of death or impending death from criminal abortion that should engage our attention. If a physician has good cause to believe that a woman on whom he is attending has been the subject of a criminal abortion, and is in danger of death, he is bound by law to notify the coroner of her condition, that her ante-mortem examination can be taken. Should she die, it is scarcely necessary to say that the case becomes the subject of a coroner's inquest. The extreme caution necessary to be exercised in treating females with whom the physician may be unacquainted is illustrated by the following case. The attention of the police, from some reason, was called to a young woman who had suffered a miscarriage; and as there seemed to be grounds for suspicion that it had been brought on by criminal means, she was questioned by the officer of the law in regard to it, when, in answer to his inquiries, she said that a short time previously she had called on Dr. ——, who had used an instrument on her. Upon this statement the doctor was arrested at once and imprisoned. Luckily for him he was almost immediately able to prove that the only instrument he had used was a speculum, and he was further able to show that he was unaware of the woman's condition. The gentleman, now deceased, had an unblemished reputation and was among the first in the profession.

The duty of the physician in regard to *ante-mortem* examinations is of importance, and should be more generally and thoroughly understood. An ante-mortem inquisition is imperatively required upon a person who has been injured by criminal violence and is in a dying condition, when his statement is the only or the principal evidence against his assailant.

Its object is twofold: first, for the purpose of procuring testimony that may be used on the trial succeeding the inquest; second, that the coroner may obtain jurisdiction in the case, and consequently the power of arresting suspected persons, or binding over witnesses to appear at a future time. No testimony taken by the coroner at an inquisition, either before or after a death, can be admitted on any subsequent trial. The deposition of witnesses, no matter of what importance, cannot be used as evidence, except on the inquest itself, for the guidance of the coroner's jury; nor can any statement made to a physician or others by the wounded person, no matter under what circumstances, be of any value except before the coroner. It is all classed as *hearsay testimony*, and is invariably excluded by the courts—with one exception. It is important that this exception should be clearly understood by the physician, as his knowledge of it may be the means of bringing offenders to justice, that might otherwise escape. It is the *dying declaration* of an individual, taken in a legal manner by a proper officer. To be valid and accomplish its object, the person by whom it is made must be in actual danger of death. He must himself fully entertain the belief that he is about to die.

In taking this deposition no oath or affirmation is administered to him by the coroner. The law attaches so much weight to a statement made under the solemn influence of the condition connected with impending dissolution, that it dispenses with the form always required at other times when testimony is taken. As a rule, the dying declaration is included and forms part of the ante-mortem examination, and may even constitute the whole substance of it; but the two are not necessarily connected. In the ante-mortem, a jury is called, who are also witnesses to the declaration; but the form of the latter is not important. Any writing that states clearly the condition of the wounded person, and sets forth the information that may be required from such person in an intelligent manner, relating, usually briefly, how his or her wounds or injuries were received—and signed by the coroner and two or three witnesses, is all that is required.

I explain this rather fully, as the law gives the

right to hold such examinations, as well as other inquests, to any justice of the peace or alderman, providing a coroner cannot be found, or is otherwise unable to hold it. The official called, perhaps for the first time, to act in place of the coroner, may be ignorant of the proper method of procedure; and should the physician be able to supply him with the lacking knowledge, particularly in a case where delay might defeat the purpose of the investigation, he would render invaluable service.

Private families usually have a great repugnance to an inquest being held on any of their members, or at their residences; and often endeavor to prevent it, even when it is required by law. While there may be some reason for this, the annoyance to them, by proper arrangement, may be extremely slight; and it will probably fall to the lot of the family physician to arrange matters in such a way that the minimum trouble shall be given by the proceedings. An inquest, in the majority of cases, is quite informal, and consists only of the deposition of two witnesses, with the medical testimony. This evidence is laid before a jury of six, who agree on a verdict, sign their names; and that, with the signature of the coroner, constitutes the entire proceeding. To prepare for the inquest, it is the work of a few minutes to select *nine* neighbors, within easy call, to be on hand when required, and the jury part is disposed of. The law requires nine to be summoned, but when six appear they can act. The witnesses may now be selected by the doctor, and advised to hold themselves in readiness for the coroner's visit. One should be a relative or intimate acquaintance of the deceased, and the other have a full knowledge of the particulars of his last illness and death. With these preliminaries cared for, a coroner's inquest will occasion only the slightest inconvenience. It would be much better for the doctor to take the trouble to carry out this plan in cases where he has doubts of the propriety of granting a certificate of death, than to give the certificate and run the risk of subjecting himself to the penalties that may result from his infringement of the law. Physicians are frequently called upon to give certificates after death, when they may not have attended the person dead. There is no law to prevent the doctor from giving it; but section one of the law of 1871, says that a person dying unattended by a physician shall be the subject of an inquest, and makes it necessary for any one cognizant of a death occurring in this way, to report it, without delay, to a coroner or to a police officer. It is well, in giving a certificate in a doubtful case, to write a full and clear statement of the facts connected with it, on the back of it, where space is provided for the purpose; or, still better, to call on the Department of Vital Statistics, connected with the Board of Health, where the disposition of the case can be determined. The registrar has always granted permits, in cases not definitely stated by law as falling to the jurisdiction of the coroner, when he has had it made clear to him that the ends of justice would not be defeated thereby.

A CASE OF POPLITEAL ANEURISM TREATED BY DIGITAL PRESSURE.

By R. W. HUTCHESON, M.D., M.R.C.S. Eng.

John Farrington, æt. 33, laborer, a native of Long Island, has always enjoyed good health, with the exception of an attack of ophthalmia, from which he suffered when a boy. Has always been temperate. Has been working in a grist mill during the last four years, where he has been engaged in lifting heavy weights, and supporting them on his knees. Noticed in July that his left knee was getting stiff, and on rubbing it discovered a small swelling in the popliteal space. He continued to follow his occupation, however, and the tumor slowly increased until January; when, having adopted a more vigorous plan of treatment, such as rubbing, poulticing, etc., it rapidly increased in size, and the leg became œdematous and painful, so that he was unable to walk.

The patient came under my care February 8th. He was then pale and nervous; bowels constipated; in fact, they had not been moved for ten days. Was taking freely of the elixir of opium to relieve his distress. Pulse 80, hard and intermittent; appetite poor; urine scanty and high-colored, with difficulty in passing it.

The left leg was somewhat flexed, stiff, painful and throbbing, with a bulging in the popliteal space, where a tumor about the size of a lemon was situated, tense to the touch; but, on compressing the femoral artery, the tumor ceased to beat and became soft, showing the absence of fibrinous deposits.

The patient was ordered a cathartic, and after its operation the tincture of iron was prescribed.

February 9th. Commenced digital pressure with lay assistants, which was continued for eight hours, but so imperfectly as to produce little or no results.

February 11th. Pressure with Signorini's tourniquet was applied to-day, and continued for three days; and, although well padded and frequently changed, it irritated the surface so much that it was discontinued.

February 15th. Firmly believing in the efficiency of digital pressure, I again resorted to that measure, but this time under more favorable circumstances. I obtained three or four volunteers, one of whom was a physician, and I stayed by the patient for fourteen hours myself. I soon discovered the secret of a speedy success, and that was to keep a steady pressure on the artery, without letting, if possible, a single wave of blood pass under the finger. I found, by experience, that it was quite impossible to accomplish that with the unaided hand. Sometimes the pressure would be too great; then again it would not be sufficient, and the blood would pass. And even with the thumb of another person pressing on one's own finger I found the same difficulties. At last I hit on a plan, which I have since ascertained was first recommended by Mr. Holden of London. I made a conical bag, and filling it with ten or twelve pounds of shot, I suspended it above the leg with the small end resting on the end of the compressing finger. This afforded efficient and steady pressure, which, although causing numbness of the finger, could be easily borne for an hour at a time.

In this way we kept up a continuous pressure for twenty-two hours, with the result of completely curing the aneurism in about sixteen hours; that is to say, the tumor became in that time hard, and ceased to beat; but the pressure was continued six hours longer to make the cure more certain. Indeed, when I left the patient at the end of the twenty-two hours, I intended the pressure to have been continued longer, and so directed; but to my surprise, when I returned a few hours after, I found everything removed.

It was curious to notice the changes in the force of the circulation in the artery when the pressure was first applied. Sometimes the artery would beat with renewed vigor, lashing the blood against the finger; and then again the current was so small as scarcely to be felt.

I applied the pressure in this instance in the middle

third of the thigh, not from choice but from necessity, as the skin over Scarpa's triangle was somewhat irritated from the pressure of the tourniquet which had been previously employed.

As regards the site of pressure, however, my attention was drawn to one circumstance which, I think, is worthy of notice, namely, that when the pressure was applied in the groin the foot became considerably colder than when applied lower down; as pressure below the origin of the profunda, therefore, causes the least interruption to the circulation of the blood in the leg, I very much question whether the upper third of the thigh is the most judicious site to apply the pressure in a popliteal aneurism. True, in the upper third the artery can be better isolated from the vein than lower down, where the vein passes behind it; nevertheless, I think that by applying the pressure as near the tumor as practicable, it gives the anastomosing arteries around the knee a better chance to accommodate themselves to the altered circulation than when it is applied high up, where, when the pressure is removed, the current of blood must necessarily be again considerably altered.

As to the amount of pain which the pressure occasioned the patient, I think it may be set down as slight, as he was able to doze during the night; but changing fingers appeared to have caused some distress. The patient subsequently complained of uneasiness around the knee-joint, which is said to arise from the stretching of the anastomosing arteries. An artery on the inner side of the knee, about an inch below the joint, increased rapidly in size, and seemed to be the principal channel of communication with the arteries of the leg.

I might mention that, within twenty-four hours after the solidification of the tumor, the œdema in the leg had entirely disappeared; and the pain had become so much less that the patient was able to relinquish the further use of the opiate, to which he had resorted to obtain relief.

Rockville Centre, L. I., *March 15th*, 1876.

Reports of Hospitals.

BELLEVUE HOSPITAL.

Notes of Practice and Peculiarities of Treatment.

INFANTILE PARALYSIS.

These cases were interesting simply from the fact that there was so slight constitutional disturbance after the attack. One baby, twenty-two months old, born of healthy parents, but itself rather delicate, was put in bed at night five weeks ago, and the next morning was found unable to either sit or stand. The child was a trifle feverish for a few days only. The left leg had been restored, but the right exhibited a marked degree of motor paralysis. The temperature of the paralyzed leg was 3° F. less than the other. The other baby, eighteen months old, born of healthy parents, and itself always healthy, was placed in bed at night four weeks ago, and the morning following, was found unable to stand, but the paralysis affected the left leg only. There was about the same difference in temperature between the right and left leg as in the other case, but the paralysis was more marked. The constitutional disturbance which followed the attack in this case was so slight, if there was any, that it was not noticed.

CERTAIN PECULIARITIES OF A DISEASED ANKLE-JOINT.

The case illustrated how much damage may follow a very slight injury of a joint, in the event that it is not properly treated after the occurrence of the accident. A man, æt. 40, hale and healthy, and weighing 270 pounds, "sprained his ankle" about two years ago; but the injury was so slight that it passed almost unnoticed, and gave him no great inconvenience, except when over-exercised, or slightly twisted, etc. As time passed along, the joint began to enlarge, and at the time of the examination it was seventeen inches in circumference, the extra size being produced by the inflammatory deposits which had been thrown out, simply because the subject was a vigorous, healthy man; whereas, in a weakly, broken-down constitution, the same amount of disturbance would probably have terminated in caries. The disease in this case was undoubtedly of traumatic origin. The instant the joint surfaces were crowded together, the patient complained of pain. The point in the treatment, therefore, was to relieve these surfaces of all pressure, which was accomplished by means of the splint commonly used by Dr. Sayre in the management of this class of cases.

LATERAL ROTARY CURVATURE OF THE SPINE—SUBCUTANEOUS SECTION OF THE LATISSIMUS DORSI MUSCLE.

The interest in this case centred upon the fact, as was stated, that it was the first time, probably, that the latissimus dorsi muscle had been cut for the relief of a deformity. The patient was a young man about twenty years of age, whose occupation obliged him to carry a loaded basket upon his shoulder. Upon accurate measurement, it was found that his right leg, for some reason unknown, was about ¾ of an inch shorter than the other, which permitted the pelvis to tilt and form a starting-point for the development of a spinal curvature, and that had been increased by his occupation. It sometimes happens that muscles engaged in the production of a deformity, when the tension has been strong and long-continued, undergo such structural changes as renders rupture or section necessary before the distortion can be overcome. When, therefore, this young man was suspended by means of apparatus which hung him from the arm-pits, and the latissimus dorsi muscle of the left side was brought out like a tense, unyielding, fibrous band, point pressure was made upon it while in this stretched condition, and pain and spasm were produced which decided the question at once that it could not be overcome without RUPTURE OR SECTION. Prof. Sayre, preferring the latter, divided the muscle subcutaneously while the patient was suspended, and the weight of the body at once overcame the curvature to a very great extent, and the tense band that rode up under the finger before the operation almost entirely disappeared. The wound was quickly closed with adhesive plaster and secured with a roller bandage. Of course, it was not practicable to keep the patient suspended for any considerable length of time, hence he was placed upon a bed, and the indications fulfilled as best they could be while in the horizontal posture. This was done by passing a rubber-band about the hips, and then fastening it to some object upon the left side of the body, and also a second band around the trunk above the point of section, which was to be secured to something immovable upon the right side. One week after the operation the patient was doing well, and was soon to be placed in the

plaster-of-Paris jacket. The final result in this case was very satisfactory.

WELL-MARKED TYPHOID FEVER — THERMOMETRICAL VARIATIONS — EFFECT OF TREATMENT UPON THE TEMPERATURE AND THE GENERAL CONDITION OF THE PATIENT.

The following case illustrated two or three points of interest and great practical importance, chiefly relating to the use of cold as an antipyretic.

First, the case furnished an excellent illustration of the statement, that the axillary temperature does not give a fair representation of the temperature of the body when the patient is first removed from the bath. It may be well to state that the only antipyretic employed in the management of the case was cold, in the form of the cold bath, and this measure was resorted to whenever the temperature was above 103° F.

The unreliability of axillary temperature was demonstrated as seen below. The patient was admitted Oct. 10, and up to Oct. 14 the temperature was taken only in the axilla; after that date it was taken both in the axilla and in the rectum. The average temperature of the baths given was 70° F., and the average duration was *five minutes*, and this is important to note, because it has a bearing upon another statement soon to be made.

Oct. 13th.—Previous to receiving a bath, the temperature in the rectum was 103° F., and in the axilla 103⅘° F.

After a bath, given of the temperature and duration noted, the temperature in the rectum was 103° F., but in the axilla the thermometer stood at 97⅘° F.

Within two hours the axillary temperature had risen to the same degree as noted in the rectum. As a rule there was not much variation between the axillary and rectal temperature independent of the effect produced by the bath, but at 2 A.M., Oct. 14, the rectal temperature was 104° F., and the axillary 105° F. At 9 A.M. the rectal temperature was 104⅘° F., and the axillary 104¼° F. The patient was placed in a bath, and immediately after being removed, the rectal temperature was 104° F., while the axillary temperature was 101° F. At another time a bath of five minutes' duration, and temperature of about 70° F., was given, and the record immediately after removal showed respectively, rectal 104½° F., axillary 101½° F. These are fair selections from a goodly number of observations made, for a bath was given six or seven times a day up to Oct. 17, all of short duration, and *without* producing marked diminution in the temperature of the body as taken in the rectum. There were several observations made which corroborated the statement, that the *first* effect of a cold bath is to increase rather than diminish the temperature *within* the body.

The case beautifully illustrated another statement now to be made, namely, that the effect desired, a reduction of the temperature *within* the body, is not obtained by a bath of short duration, for it was only when the bath was *prolonged* that any marked effect upon the rectal temperature was produced.

To illustrate: on October 17th a different method of giving the cold bath was introduced. It was prolonged, and the water was gradually cooled to 65° F. At 9.15 A.M., October 17th, the temperature in the rectum was 104⅘° F., and in the axilla 103¼° F. The patient was placed in a bath of 80° F. At 9.40 the rectal temperature was 104⅘° F.; at 9.50, still in the bath, now cooled to 65° F., the rectal temperature was 101° F.; at 10 o'clock, rectal temperature 101¼° F. and bath still at 65° F. The patient, now complaining considerably of cold, his teeth chattering, etc., was removed from the bath and received a small amount of whiskey.

At 10.22, twenty minutes after removal, the rectal temperature was 102⅘° F., and at 11.30, 101° F. At 12.40, the rectal temperature was 101¼° F., and at 1.40 it had again reached 104° F.

At 2 P.M., when put into a bath, the rectal temperature was 104⅘° F. The bath was cooled down to 65° F. in fifteen minutes, and the thermometer in the rectum stood at 105° F. At 2.35, with the bath at 65° F., rectal temperature at 104½° F. and a duration of thirty-five minutes; the patient was removed, and ten minutes after the thermometer in the rectum indicated a temperature of 104° F. At the end of one hour the temperature was 103⅘° F., and the bath was again resorted to and prolonged for half an hour, and when the patient was removed his temperature stood at 105° F. Ten minutes after removal it had fallen to 104° F., and forty-five minutes after removal it was down to 102¼° F. These also are sufficient selections to illustrate the statement, but it will be observed in addition that no material fall in temperature took place while the patient was *in* the bath, just the opposite occasionally, but that soon *after* removal from a prolonged bath the temperature began to decline, and continued to do so for some hours.

The other peculiarities of the case were:

1. Absence of prominent abdominal symptoms.

2. Absence of delirium, which is a rare circumstance in a case of considerable severity and characterized by high temperature.

3. The patient did not take to bed until after admission; the characteristic eruption appeared two days after admission, which showed that the disease was seven or eight days old, hence the fever must have commenced four or five days before admission. In this fact, then, lies an exception to or a case in evidence against the statement that the beginning of the disease should be reckoned from the date of taking to bed.

TEMPORARY ATTACKS OF APHASIA — LOSS OF POWER IN THE RIGHT ARM.

This case was worthy of note for the two items indicated.

A man, æt. 60 years, had two slight attacks of pleurisy three or four years ago, but aside from these had always been healthy until about two years ago, when he began to suffer more or less pain over the region of the sternum, and has also suffered somewhat from shortness of breath, especially on going up stairs. A few days ago, while sharpening his razor, he suddenly discovered that he was unable to speak, and about fifteen minutes elapsed before his power of speech returned. It was difficult to determine whether he could move his tongue or not at the time of the loss of ability to speak. There was marked loss of power in the right arm, but the leg remained unaffected. This attack was one of quite a number from which he has suffered. About a year ago he had a similar attack, which occurred about four o'clock in the morning. At that time he was unable to speak, but was able to move the tongue; his face was slightly drawn to the left side, but there was no trouble with the leg. The inability to speak soon passed away. Six weeks afterwards he had another attack while walking across the street, became paraplegic, the right arm became very much crippled, and he was also unable to speak. This attack lasted about two hours, and then passed away. His last attack has been described. The man did not

suffer from headache, protruded the tongue correctly, and had the slight loss of power in the right arm already mentioned. Sensation was unimpaired. It was believed that these attacks were due to embolism. The man had valvular disease of the heart.

VALUABLE POINT IN PHYSICAL DIAGNOSIS.

The point relates to pulmonary resonance over the sternum. The edge of the right lung reaches to the *centre* of the sternum, as can be determined by *light* percussion. When the person is made to take a full inspiration, and hold it, pulmonary resonance can be easily detected entirely across the sternum. Some of the books teach that dulness upon percussion is normal over the sternum, hence the practical inference that when resonance is obtained over this region some abnormal condition is present, which is not necessarily true.

INJECTION OF STIMULANTS INTO THE TRACHEA BY MEANS OF THE HYPODERMIC SYRINGE.

The patient was in a condition of collapse. About one drachm of a fluid, consisting of equal parts of water and brandy, was thrown slowly into the trachea by means of a hypodermic syringe, the needle of which had been thrust through its walls. The patient did not rally, but no ill effects were produced, nor inconvenience given.

The inner surface of the trachea is said to absorb volatile substances more rapidly than any other surface in the body.

ITEM OF INTEREST IN A CASE OF CHRONIC HEART DISEASE.

A noticeable feature of this case was the presence of well-developed valvular disease and hypertrophy with dilatation, without any history of rheumatism or syphilis, in a young man, æt. 23 years.

The case in addition illustrated the occurrence of Bright's disease secondary to cardiac disease, and at the time of the examination he was also suffering from pleurisy with effusion.

CERTAIN PECULIARITIES IN A CASE OF PNEUMONIA.

One or two points of interest were noticed in connection with a case of this disease occurring in a young man, æt. 25. He had been "on a spree," got wet, went to bed with his wet clothes on, and awoke with a chill. The severity of the pleuritic pain was a marked feature of the case, but a peculiarity was noted in the fact that it did not come on until some six or eight hours *after* the chill. Upon the day of admission his temperature was 105⅘° F., and he received thirty grains of the sulphate of quinine. The next morning his temperature was 104° F., and twenty grains were administered. The following morning the thermometer stood at 101¼° F., and only five grains were given, and the morning after the temperature was normal. Good diet and a moderate amount of stimulants had also entered into the general treatment. There was one item of local treatment which may be worthy of note. The pleuritic pain had been unusually severe and unusually prolonged, and the characteristic expectoration had also been continued for some time after the second stage was well developed. For the relief of the intense pleuritic pain, compresses wrung out of cold water had been employed for three hours faithfully, but they afforded no relief whatever. This was not, perhaps, a fair test of their efficacy in relieving the pleuritic pain of the early stage of the disease, for the case had been one of some days' standing when the measure was employed. A hypodermic injection of morphine was administered. In addition, the chest was to be firmly strapped with strips of adhesive plaster over the region where the pain was located, and this was done to prevent, as much as possible, the inflamed surfaces of the pleura from rubbing against each other. The strapping gave great relief.

There is a point in physical diagnosis which the case illustrated, namely, the possibility of determining from the percussion note obtained over the anterior portion of the chest which lung is affected posteriorly by the consolidation. The vesiculo-tympanitic percussion note is to be expected over the portion of lung unaffected by the inflammation, and in this case it was very well marked over the right lung anteriorly. Over the lower lobe of the right lung, *posteriorly*, bronchophony, bronchial breathing, and dulness upon percussion were well marked.

NEW IDEA RELATING TO CHANCROIDS AND STRICTURE OF THE RECTUM.

The interest in two cases which were seen centered upon the fact that they were illustrations (1) of the ease with which chancroids inoculate themselves, and (2) that stricture of the rectum may be a final result. Both patients were females. One showed chancroids near the meatus urinarius, in the fourchette, upon hemorrhoidal growths which were present around the verge of the anus, and the effects of the virus were plainly seen within the cavity of the rectum. When the rectum is reached troublesome ulceration becomes developed, and, as a result of this stricture, which was well illustrated in the second patient.

They were regarded as more typical cases than are usually seen. These strictures are often spoken of as syphilitic strictures of the rectum, but it was believed that, in a very great majority of cases, they are of *chancroidal* origin. In a large percentage of cases at least there is no constitutional syphilis present, or evidence of its previous existence. The patient with stricture before us gave no history of constitutional syphilis, but there were well marked chancroidal cicatrices present and a history to sustain them.

Something, it was said, could be done to prevent the spread of the disease up the rectum, and in this case nitric acid was applied, and the ulcers subsequently dressed with iodoform. Such strictures for obvious reasons are not of common occurrence in the male subject.

WATER-LOGGED.

The patient was a victim of chronic Bright's disease, and in his dropsical condition weighed 250 pounds, but when he went out of the hospital he weighed only 130 pounds.

CHRONIC BRIGHT'S DISEASE—LOCALIZED PLEURISY.

In this patient these two conditions were present, and it was remarked that the latter was a very frequent accompaniment of the former in its *earlier* stages.

OCCASIONAL RESULT OF ŒDEMA.

A male patient suffering from Bright's; had extensive œdema of the lower extremities, and the result referred to was that the legs remained of their great size after the man felt well enough to leave the hospital and go to work. The legs felt like a log, and could scarcely be made to pit upon pressure.

SOLE-LEATHER SPLINTS—AMMONIA-WATER.

Sole-leather softens much more readily when placed in cold water if a small quantity of aqua ammonia is

added. A drachm to the quart is perhaps sufficient, and will soothe the surgeon's patience as well as soften the leather.

HOT WATER AS AN AGENT FOR BRINGING ABOUT RELAXATION OF CONTRACTED MUSCLES.

The case illustrated in a striking manner the effect which is sometimes produced upon contracted muscles by the use of hot water. The water was poured upon the contracted parts for a considerable length of time at each sitting and repeated twice a day.

When this measure was first resorted to in the case before us, the knees were held forcibly in contact with each other, and the heels were in close contact with the nates.

The man is now able, at the end of little more than one year, to separate the knees about eighteen inches, and can sit in a chair with his feet upon the floor. This relaxation is more than temporary, for the reason that it continues beyond the time in which the muscles are under the immediate influence of the hot water.

ELEMENTS IN THE DIAGNOSIS OF SYPHILITIC HEMIPLEGIA.

The patient, a man æt. 35, was thought to have syphilitic hemiplegia for the following reasons:

1. Hemiplegia occurring under the age of forty, if embolism can be excluded, is presumably syphilitic, and the presumption increases in strength in proportion as the age grows less.

2. In syphilitic hemiplegia chronic headache is a prominent feature, both preceding and following an attack, and is usually worse at night.

3. Syphilitic hemiplegia almost invariably occurs without loss of consciousness.

There was a doubtful syphilitic history in this case, yet no secondary manifestation could be traced. That fact, however, led to the *fourth* observation, namely, that where the nervous system is secondarily involved by syphilis, other secondary manifestations, such as roseola, sore throat, etc., etc., are only very slightly, if at all, developed.

Again, if there is a second attack of hemiplegia soon after the first, but affecting the *opposite* side, it was believed to be almost absolute proof that the first attack was syphilitic. The patient was placed upon iodide of potassium gr. xx. t. i. d., to be gradually increased until six drachms are taken daily, if necessary, to effect an improvement. For the headache, gtt. xv. of the fl. ext. conium (Squibb's) were added, for it was said to have the power of prompting the action of the iodide, and will give relief in cases where the potassium alone has failed. At the end of two weeks this man's headache was very much relieved.

PROBABLE UNION OF THE AXIS AND ATLAS—SYPHILITIC HISTORY—MOTION RESTORED BY MEANS OF HYPODERMICS OF MERCURY.

The case was interesting as illustrating one point, namely, the value of local treatment by means of the hypodermic syringe, as compared with the results obtained by administering the same remedy by the mouth. The man was unable to perform any movements of the head which are permitted by the motility existing between the axis and atlas, nor could he make a bow with any commendable degree of suppleness. From the fact that he had a syphilitic history, it was suspected that his stiff neck was one of the results of that disease, consequently iodide of potassium and mercury were administered in varying doses by the mouth, but without producing any apparent benefit. He was then treated by the use of hypodermic injections of the bichloride of mercury in the nape of the neck, and improvement was immediate and marked. The movements of the head were almost completely restored. The mercury was given in one-thirtieth grain doses, once a day.

ASTHMA—HYPODERMICS OF ATROPINE.

This was a case also that had proved rebellious while using the ordinary remedies by the mouth, but yielded very readily to one-fortieth grain doses of the sulphate of atropia, administered hypodermically in the nape of the neck.

Progress of Medical Science.

ACTION OF THE BILIARY SALTS ON THE PULSE, ARTERIAL TENSION, RESPIRATION, AND TEMPERATURE.—MM. Feltz and Ritter have found that injections of bile into the blood in non-toxic quantities cause a reduction in the frequency of the pulse and respiration, and a diminution of temperature and arterial tension. Injections of the coloring matters of the bile alone, or of etherial solutions of the cholesterine, do not produce these functional disturbances, but injections of moderate doses of solutions containing the glyco-and taurocholate of soda, in the proportions in which they exist in the bile, do produce them. The action of the biliary salts is exercised primarily on the blood, and through it on the muscular system; in fact these functional disturbances are produced even when the pneumo-gastric and great sympathetic nerves have been previously divided. The action of the biliary salts on the muscles is further marked by a rapid exhaustion of muscular contractility. Blood contaminated by even hardly appreciative quantities of the biliary salts flows more slowly through the capillaries than the normal blood. This reduction of velocity is manifestly due to the action of the biliary salts on the red globules, though the latter may show no evident change; for if the serum of the blood, and defibrinated blood be treated by the same agents and placed under identical conditions, the former shows no sensible retardation in flowing through the tubes of Poiseuille.—*Gazette Médicale de Paris*, March 18th.

WEIGHT OF NEW-BORN CHILDREN.—Ingerslev, of Copenhagen, finds as the result of his researches upon this subject, that every child loses weight during the first days of extra-uterine life. An increase may occur on the first day, if the meconium have escaped during birth, or if it have not been discharged before the first weighing, and the child have sucked in the meantime. This increase is only transient, and the loss of weight shows itself at the second and third weighings. The loss corresponds to one-fourteenth or one-fifteenth of the body-weight, and is both absolutely and relatively greater in the children of primiparæ. As for the original weight of the body, the loss is greater the less developed the child is, and in the same proportion the increase is more delayed; premature children show a corresponding relation. The increase begins as a rule on the fourth day. As regards the conditions having an influence on the loss, no connection can be found between the detachment of the umbilical cord and the commencement of the increase; but the chief importance must be attached to the relation between the egesta and ingesta. The loss cannot be explained

by the discharge of meconium and urine alone, for not more than half of these correspond to the loss of weight in a given time. The remainder of the loss must be ascribed to a consumption on the part of the child, and at first sight too small an amount of ingesta, or defective nourishment, might indeed be regarded as the cause of this; but as abundant a supply of food as the child can use does not compensate for the loss. The consumption of tissue and the consequent loss of weight are a physiological necessity.—*The Obstetrical Journal*, March, 1876.

Systemic Infection from Purulent Vaginal Discharges.—According to Dr. E. T. Easley, it is probable that septicæmia may supervene on a profuse and persistent leucorrhœa, and absorption in such cases takes place through the vaginal walls as well as other mucous surfaces. The reasons that lead him to this view are, in the first place, that endosmosis depends upon the attraction of the membrane for the liquids, and its current in mucous membranes is found, in accordance with their physiological action, to be from the exterior to the interior. The more minute and extensive the vascular supply of a membrane the larger, of course, will be the endosmotic surface presented. In the second place, the transudation in facility and rapidity bears an inverse ratio to the thickness of the epithelia; but thirdly, the fuller and more tense the vessels of a part are, the more difficult will be the process of absorption; and, converse, ly, a rapid movement in the capillary blood, with diminished tension of the vessels, greatly favors the reception into the circulation of matters fit for absorption. The vagina is among the most highly organized structures in the human economy, its vascular, lymphatic, and nervous connections being in immediate relation with those of the other pelvic viscera. This shows obviously the liability of extraneous matters from the vaginal walls being absorbed into the circulation, more particularly when these walls are in an unhealthy condition. It may be safely said, that a vaginitis attended with profuse yellow leucorrhœa, is certainly evidence of more or less extensive abrasion of the mucous epithelia of the genital canal, hence the readiness with which putrid or broken-down products may be taken up.—*The Medical and Surgical Reporter*, April 1, 1876

Complete Extirpation of the Larynx.—Another case in which the larynx was completely removed by operation is reported by Prof. Maas, of Breslau. The first signs of trouble in the larynx showed themselves at the end of September, 1873. By the middle of the following April, the patient, a man of 57, suffered so much from the stricture of the larynx caused by the large and growing tumor, that tracheotomy was performed by Dr. O. Riegner. By the first of June, however, the tumor came to press so much upon the œsophagus that it was impossible for the patient to swallow the smallest portion of fluid. The operation of extirpation of the larynx was therefore performed by Prof. Maas, who found great advantage in adapting a modification of Rose's position, with the head hanging backwards. After the operation the patient found the frequent introduction of the œsophageal tube so painful that Prof. M., on the third day, passed an India-rubber tube through the wound, down nearly to the cardiac end of the œsophagus, and left it in that position. Through this the nutrition of the patient was satisfactorily carried on. On the ninth day he was able to leave his bed; on the eleventh an unsuccessful attempt was made to introduce an artificial larynx; on the twelfth the bronchitis, from which he had suffered since the tracheotomy, became seriously worse, and on the fourteenth day he died of pneumonia. The microscope determined that the tumor which involved the whole larynx was adeno-fibroma carcinomatosum.—*Langenbeck's Archiv, XIX*, 3. 1876.

Resection of the Larynx—Prof. C. Heine, of Prague, reports a case which he diagnosticated as concentric hyperchondrosis of the larynx, and which resulted in almost complete obliteration of the cavity of that organ. Tracheotomy had been performed, with temporary relief, also a subsequent dilatation of the fistula; but the case became so urgent that, on December 18, 1874, Prof. H. performed an operation which he designates as resection of the larynx. It consisted in splitting the thyroid cartilage in the median line, and then making a sub-perichondrial dissection of the anterior halves of the two sides, and removing them with forceps. The operation was so far successful that the patient regained the power of speaking intelligibly, and of swallowing liquids and solids. Subsequently, however, his condition deteriorated, and he succumbed to tuberculosis on November 2, 1875. At the autopsy, syphilis, which had been suspected, but denied, was proved to have been at the root of the laryngeal disease.—*Langenbeck's Archiv, XIX.*, 3, 1876.

Comparative Statistics of Trephining in Wounds of the Head.—Dr. Bluhm, of the Prussian army, furnishes the following table of the mortality after trephining for gunshot and other wounds of the head, arranged according to the period at which the operation was undertaken:

Trephining.	In General.	In Gunshot Wounds.
Primary	55.26 per cent.	64.29 per cent.
Secondary.....	39.24 " "	42.86 " "
Late.....	33.90 " "	11.11 " "

Thus, in other than gunshot wounds, a progressive improvement in the result of trephining is observed, according to the length of time that has passed since the receipt of injury. In the case of gunshot wounds, on the other hand, while the result of primary and secondary trephining is more unfavorable, the late operation gives very much better figures.—*Langenbeck's Archiv, XIX.*, 3, 1876.

A New Series of Lithotomy Cases.—In a paper read before the Georgia Medical Association, Dr. W. F. Westmoreland furnished a brief synopsis of thirty-seven cases of urinary calculus, which came under his personal observation. In thirty-four of the cases in which the stone was removed from the bladder, the operation was done by lateral lithotomy in thirty-three, and in all but one case the section was made with the lithotome. As for lateral operations, Dr. W. states that any surgeon, whatever may be his skill, will always operate best with instruments that he is accustomed to use, and by the method with which he is most familiar; while he is assured that statistics have demonstrated the fact that surgeons who have adopted the lateral method can present as brilliant a series of lithotomies as others operating by other methods. If he tabulated his results, and withdrew two cases in which he had operated under protest, there would have been only one death in thirty-two cases,—a result of which he may justly be proud.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, April 22, 1876.

STATE BOARDS OF HEALTH, AND A NATIONAL HEALTH BUREAU.

When we appreciate how much has been accomplished by local health boards in the improvement of the sanitary condition of the communities living under their jurisdictions, we are impressed with the necessity of utilizing their good offices to a larger area of country. It is true that the public are beginning to acknowledge the benefit which a well-managed health board can confer in systematizing measures for the prevention of the spread of disease, and of enforcing sanitary ordinances in times of emergency; but more than this is required. Increased knowledge of sanitary requirements will eventually prepare each community throughout the country, not only for quiet submission to sanitary laws by government officers, but will cause them to ask for their enactment by their law-givers. Thus far, only some of the larger cities are blessed with efficient sanitary boards, while many of the smaller towns are entirely without any such provisions. In the meantime, however, something must be done towards shaping the necessities of the people, and devising some plan which shall meet the present urgent want. Popular sentiment must not only be encouraged, but must be led into the channel of practical usefulness.

Every practical sanitarian is aware of the fact that there is no town, village or hamlet which cannot be benefited by suitable sanitary regulations; none in which the death rate could not be diminished, and the prevention and spread of epidemic diseases could not be brought under the influences which our present knowledge of epidemology has made available. How often do we hear of epidemics in small towns and in country districts, which are known to be due to causes within the control of proper sanitary measures? And yet, for the power to enforce them in the shape of a legally authorized board, nothing whatever can be done to save precious lives. When we take into account the large number of the small villages and towns throughout the country, and consider the practical impossibility, for the present at least, of creating sanitary bureaus for each, we are naturally forced to the conviction that the only possible way to serve the interests of all, and insure proper attention to health matters, would be the establishment of some general system, of which each of these smaller places should be a part. Taking this, then, as the starting-point of some suggestive remarks, we may follow it in a general way through all its legitimate ramifications until it shall centre, if possible, in a national bureau, which shall be one of the departments of the general government. How such a system can be made a perfect one, has been a problem to which much attention has been directed, and concerning which many fruitless attempts at legislation have been made. It will probably be a long time before any plan will be settled upon which shall satisfy the general requirements of the country, and meet the approval and command the support of the people at large. Whenever any measure is proposed calculated to give a practical turn to the idea, there is so much of political jobbery infused into it, that it is soon apparent to every one that there is more concern for the creation of offices for the benefit of the agitators of the reform, than a desire to consult the public interests or minister to its welfare. The difficulties in the way should not, however, interfere with a discussion of the subject, nor thwart the legitimate and reasonable efforts towards the much-desired result.

One of the truly practical methods of overcoming many, if not all of the difficulties, is to so simplify the system as to make it consistent, feasible, and economical. As a contribution to this part of the general subject, some suggestions which occur to us may be worthy of consideration.

It would appear that the first step which we can take is the utilizing of the means already at our command, in amplifying, so to speak, the powers of our local boards. In many of the large cities of this State we have local boards which, in their way, are doing all that can be expected of them. Let us take them, as starting-points of a general system of sanitary regulation throughout the State, the establishment of a State Board of Health. The idea will at once suggest itself that this State Board can be composed of members from the local boards; for instance, one from each. The realization of such an idea is, in our opinion, the only practical way of overcoming the main difficulty in the case.

The question of economy which naturally comes up in connection with this measure, may be easily and satisfactorily answered. The delegate from a local board need not have any extra allowance other than that for ordinary travelling expenses.

The necessity for that centralization of power which shall make the general board effective and its doings authoritative, suggests the appointment of an executive officer. We care not how he be selected from the board provided he have the proper qualifications. As the major part of the work must necessarily fall on this officer, he should receive a salary sufficient to enable him to devote all his time and energies to his duties. While this plan of organization might be practicable in this State, we are aware that in other States some modifications might be necessary. The general principle, however, could be carried out so that the local and general boards of each State would be dependent on each other. When the State Boards shall have been created throughout the Union, the foundation will then be laid for a Central Bureau of Health as a distinct department of the general government. The same relation should be maintained between the general Bureau and the State Bureau as between the latter and local boards, constituting a system harmonious in all its parts, and thoroughly impartial in its aims.

THE ARMY MEDICAL RANK BILL.

Under present circumstances, there is not a very brilliant prospect for the Army Medical Rank Bill. It is true it has passed the Senate and the Military Committee of the House; but there are difficulties in the way of its final success which are quite formidable in their nature. Probably to the bill itself there would be no particular objection, but in the proposed report of the Committee it is so mixed up with other matters which bear upon appropriations, that there is a chance that much unnecessary prejudice may be brought against it, which may in the end defeat the whole scheme. Why cannot the House Committee report the bill by itself? The matters with which it is now associated are not even legitimate side issues. The medical profession of the United States have given a great deal of attention to the subject of relative army rank; and it is but just to them that the question involved in the bill should be placed upon its own merits.

CHANGES OF RESIDENCE AND SANITARY NECESSITIES.

At this time of the year, when the moving portion of the population are engaged in hunting up new quarters, the necessity of looking after sanitary requirements cannot be too strongly urged. In a large majority of the houses "to let," there are the seeds of future disease and possibly death for various members of the incoming families. The drain pipes are in many cases defective, the water-closets are in some of the best houses very little attended to, while the cellars are very apt to be filled with all sorts of decaying material, to be unventilated and to imprison the poisoned vapors of defective drainage. And yet, how few of the "House hunters" take these things into account?

QUARANTINE SELF-SUPPORTING.

We hope that the bill before the Senate proposing to make quarantine self-supporting will become a law. The fees which have been collected by the Health Officer are altogether out of proportion to the public or professional services rendered, and should be abolished. Although we have reason to believe that the present Health Officer has been honest in all his dealings, the facilities for wrong-doing are too many and too strong for the ordinary office-holder to resist. The salary for the Health Officer, proposed in the bill, is amply sufficient, and will secure the services of competent professional men. A synopsis of the bill is presented in another column.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, April 6, 1876.

Dr. S. S. Purple, President, in the Chair.

ON THE CAUSE OF ROTATION IN LATERAL CURVATURE OF THE SPINE.

Dr. A. B. Judson read an interesting paper upon the above subject, in which he presented the views of nearly all authors who have written upon the question of rotation of the vertebræ in lateral curvature, and it was found to be a well-recognized fact that lateral curvature of the spine had that peculiarity in all cases, except those which were developed in connection with pleurisy. In that class of cases the rotation was either absent or only very slight.

The cause of that rotation had engaged the attention of Barwell, Adams, Shaw, Holmes, Bigelow, Dick, Bauer, Meyer, Bell and others, and had elicited almost as many explanations as there were authors. After reviewing the explanations given by the authors referred to, the author of the paper proposed the following explanation—namely, that rotation of the vertebral column was caused by the muscular and fibrous structures attached to its spinous processes, which kept those processes near the median line of the trunk, while the bodies of the vertebræ, being devoid of attachments, were moved to one side of the median line.

The doctor then referred in detail to the muscular and ligamentous attachments of the vertebræ; and it was found that the anterior portion of the vertebral column was almost entirely free from attachments, leaving the bodies of the vertebræ free from control, while the posterior portion of the column was held near the median line by attachments to which reference had already been made. Speaking geometrically, the author of the paper claimed that the rotation in the case in question was upon a remote axis. The chief feature of the explanation was the recognition of the fact that the posterior portion of the vertebral column was firmly bound to the walls of the trunk, while the anterior portion was left to move to the right or to the left, according to the direction of the curve.

It could be seen that the author of the paper did not attribute the rotation to disparity between the action of single muscles or groups of muscles, but recognized the combined action and sustentative power

of all the muscles and ligaments upon either side of the trunk.

Dr. Judson demonstrated his theory by means of an articulated vertebral column, suspended in a frame in such a manner that pressure could be brought to bear upon the top of the column. The articulation was effected by means of a brass strip, perhaps one-fourth of an inch in width, very flexible, and the spinous processes were attached to the sides of the frame by means of metallic strips or wires, which represented the attachments upon the human trunk for retaining those processes nearly in the median line.

Now, when pressure was made upon the top of the column, it was seen that the spinous processes were held nearly in the median line, while the anterior portion of the vertebræ rotated to a greater or less extent, and in a direction corresponding to the degree of curve made in the column by the pressure from above. Rotation of the bodies of the vertebræ, it was remarked, had been regarded as an obstacle to the restoration of the vertebral column to its proper form. It was maintained, however, that mechanical treatment was beset with difficulties, not so much from mechanical displacement, but because the portion of the column which deviates farthest from the normal line cannot receive direct mechanical support.

Transmission of weight from the anterior portion of the vertebræ, by means of support applied to the posterior portion of the spine was suggested as an element which should enter into the construction of any apparatus, or the adoption of any measure for the treatment of this affection.

Prof. Sayre regarded the explanation which Dr. Judson had given for the rotation present in lateral curvature of the spine as exceedingly plausible: and that, apparently, it had been completely demonstrated. He drew special attention to the principle of treatment which had been brought forward by Dr. Judson, and which had not heretofore been adopted, namely, removal of compression of the spinal column from above downwards, if a perfect cure was to be most readily effected. He was the more pleased with this idea, because it explained to him how it was that such benefits had followed the use of the plaster-of-Paris jacket, which he had been using for some time past in the treatment of Pott's disease of the spine, and latterly in the treatment of rotary lateral curvature. Prof. Sayre then referred, somewhat at length, to his use of the plaster jacket in the treatment of both of these affections, what first induced him to resort to it, how it was to be applied, etc. He had used it in four cases of rotary lateral curvature, in three of which he had made section of the latissimus dorsi muscle; and in all of his cases, the treatment had been attended by remarkable success. For Pott's disease he had applied over one hundred and thirty plaster-jackets.

Correspondence.

MEXICO AS A RESIDENCE FOR INVALIDS.

Letters from Prof. E. R. PEASLEE, M.D.

I.

Hotel Iturbide, City of Mexico, *March* 12, 1876.

Mr. Editor:—While awaiting my breakfast this morning, it occurs to me to give the readers of The Record some facts respecting this city and some other places in Mexico, as a residence for invalids from the North. I will, however, at this sitting, explain how this capital may be most easily reached from New York, and answer some of the questions which may naturally arise respecting the incidents of such a trip.

1. If the traveller is not averse to a sea voyage all the way from New York to Vera Cruz, he can leave for the latter port every twenty-one days, in one of F. Alexandre & Sons' steamships, which reach Havana within five days, without any intermediate stop. Remaining there two days, they run, in about thirty-six hours, to Progreso, in Yucatan, to remain one day; thence, in twelve hours, to Campeche, in the State of Campeachy; whence, after a stop of twelve hours or less, they arrive at Vera Cruz in thirty-six hours more. This makes the trip from Havana to Vera Cruz also about five days, and the whole time thither from New York twelve days or less.

This line consists of six excellent steamers, of from 1100 to 2000 tons, all of which sail from New York to Havana, one leaving each week; but only three of them go on from Havana to Vera Cruz, viz: the City of Merida, City of Havana, and City of Mexico; and it is one of these which leaves New York once in three weeks, as before stated. If, therefore, the tourist wishes to spend one or two weeks at Havana, he will go there on one of the other three ships of the line, viz: the City of New York, City of Vera Cruz, or the Cuba, and take the steamer to Vera Cruz when it arrives at Havana from New York.

2. But if the sea is to be as far as possible avoided, the following route may be adopted, and was so by myself: The steamers above named, as sailing from New York to Vera Cruz in twelve days, remain five days at Vera Cruz, and then sail for New Orleans, making this trip in five days also. They touch (but do not land) at Quxpan and Tampico, on the way to New Orleans. Thus, the trip from New York to New Orleans, via Vera Cruz, is accomplished in twenty-two days. Remaining five days at New Orleans, these three steamers now retrace their course back to New York, calling at all the places I have mentioned, in the inverse order in which I have named them. The times are also the same as before; *e. g.*, the City of Merida, on which I sailed, is five days in going from New Orleans to Vera Cruz, including the stops at Tampico and Quxpan; remains five days at Vera Cruz; is five days on the trip thence—stopping at Campeche and Progreso—to Havana; remains there two days, and reaches New York in four to five days more. To reduce the sea voyage, therefore, to Vera Cruz to a minimum, the invalid will go to New Orleans from New York by land, which can be accomplished by four distinct routes in seventy-two hours, or less, and then by sea to Vera Cruz in five days more; or eight days from New York. If the route from New York to New Orleans by Louisville and Milan—the "Great Jackson route"—or that by Lynchburg and Atlanta—the "Kenesaw route"—be taken, there is but one change of cars on the way, viz: in Louisville, on the former route, and at the Relay House, seven miles beyond Baltimore, on the latter. Having travelled over both these, and found them both excellent, I would advise the tourist to select the one which carries him through those parts of the South which he most desires to see. On the other two routes to New Orleans, viz: the "Coast Line," through Richmond, Wilmington Charleston and Savannah, and the "Piedmont or Air Line," through Richmond, Danville and Charlotte to Atlanta, where it meets the Kenesaw route, the traveller changes from the sleeping car by night to the common car by day. The trip may be still further varied by going by land to Cedar Keys (Fla.), and by steamer thence to Havana in two and

a half days. I expect to return by that route; *i.e.*, from Vera Cruz to Havana, thence to Cedar Keys, and by land to New York.

Arrived at Vera Cruz, the tourist who has taken his ticket for the round and rapid trip, has five days in which he may visit this city and some other places, and return to take the same ship to Havana or another to New Orleans, according to his destination. Or he may remain in the interior, and take the next ship of this line in twenty-one days, on the same ticket; or leave Vera Cruz for Havana direct on a French steamer, on the 18th of each month, or by an English one about the 1st of each month.

There is but one passenger train daily each way over the railroad from Vera Cruz to this city, leaving Vera Cruz at 11½ at night and Mexico at 10½ at night, and arriving in this city at 6½ in the evening and at Vera Cruz at 3½ P. M. Just now, on account of revolutionary disturbances, the trains are run through more rapidly, and mostly by daylight, leaving Vera Cruz at 4 A. M. and this city at 5 A. M. The whole length of the railroad is 263½ miles, and the run up is made in sixteen hours and down in fifteen. The cost of the road was $30,000,000. The first 26 miles out of Vera Cruz is almost a dead level, and very monotonous. The ascent is then more rapid for the next 27 miles, when we come to the first long iron bridge—Puente de Atoyac—and from this point to Boca del Monte, 54 miles further, the scenery is the most grand and magnificent, and the engineering the most difficult, I have ever seen in any country. From the station in the village of Maltrata the train winds to and fro on the brow of the mountains, a distance of 8¼ miles, when it is almost perpendicularly above the station, and at a height of 1513 feet. The snow-covered peaks of Orizaba, Malinche, Popocatepetl and Iztaccihuatl—all of them between 17,000 and 18,000 feet above the level of the sea, and all four of them in view for several hours after we leave Boca del Monte—are the grandest objects in their line to be found in the world. The highest grade on this road is 290 feet to the mile, and the shortest curve only 250 feet radius. All of the bridges are of iron, and the curved bridge of Metlac has a radius of only 350 feet. The engines, of English manufacture, weigh seventy tons, and cost $30,000 each. They are double-enders, and made of steel throughout, their bearings having been invented for this road, to enable them to follow the very short curves. They are capable of taking the train up a grade of 400 feet to the mile.

The expenses of the different trips I have described are as follows: New York to Havana, by steamer, first class, $65 currency; second class, $40 currency; New York to Vera Cruz, first class, $100 gold; second class, $60 gold; New York to New Orleans, first class, $130 gold; New Orleans to Vera Cruz, first class, $60 gold; second class, $45 gold; New Orleans to Havana, first class, $90 gold. All information respecting days of sailing, state-rooms, etc., may be obtained from F. Alexandre & Sons, 31 and 33 Broadway, N. Y., and J. M. Witherspoon, 35 Carondelet street, New Orleans. The railroad fare from Vera Cruz to Mexico is $16, $12 and $8 gold, for the first, second and third classes. Up to the present time there are no sleeping or parlor cars on this route. The expense by land from New York to New Orleans, by either of the four routes before mentioned, is but $42.50.

The expense of living in this city is reasonable. At this hotel, which stands in the front rank, it amounts to $4 or $5 per day (according to the room occupied) to transient guests, but rather within $100 per month to those who remain a long time. In Vera Cruz, Orizaba, Cuernavaca, and other cities I shall recommend to patients, it is $2 per day, and less by the month. The charges for medical attendance will be specified in my next letter.

The annoyance mentioned by books of travel in Mexico from insects of divers kinds—mosquitos, fleas and other "camarades de lit," and even scorpions, perhaps—I have scarcely experienced at all. I was invaded by a horde of mosquitos with a very high note, during a night at Vera Cruz; and I have here seen a single diminutive, and very harmless-looking individual of the "cimex" family; but the latter did not make, and I presume had not meditated, any attack upon me. The so generally asserted danger to the tourist from robbers is also doubtless an exaggeration; a persistent repetition, perhaps I should say, of what was true fifteen or twenty years ago. Not a single traveller upon the railroad has been thus molested since it was first opened, four years ago. I should, however, add that there is always an escort of fifty to one hundred soldiers on board of each passenger train. It is also currently reported that the rich bankers, Barron and Escandron, do not live in their splendid country seats at Tacubaya, four miles out of this city, lest they should be kidnapped, and be compelled to pay an immense sum for their ransom.

I had heard of the present revolution just before leaving home, and find it is daily gaining ground. The *pronunciamientados* yesterday threatened to destroy the bridges on the railroad and blow up the tunnels, unless the government at once sends them the sum of $25,000. The fulfilment of this threat would bring me a real inconvenience. *Mais nous verrons.*

It is calculated that but one in one thousand of the inhabitants of this city, or two hundred and fifty perhaps in all, speak the English language. French is much more in use here; but he who has a sufficient acquaintance with the Spanish language has very great advantages. English is spoken at the Hotel Gillow, which is therefore well patronized by Americans. It is also spoken by one of the clerks of the Iturbide.

I have been thus explicit on non-medical points in this communication, hoping that I may induce some of my professional brethren also, as well as their patients, to take this delightful trip. It will be seen that it can be accomplished by an absence from New York of scarcely more than four weeks. My next shall be of a more strictly professional character.

E. R. Peaslee.

SHORTENING THE COURSE OF MEDICAL STUDY,

AND THE REQUIREMENTS OF THE UNIVERSITY OF VIRGINIA.

U. S. N. Hospital, Washington, D. C., April 8, 1876.

To the Editor of The Medical Record:

Dear Sir:—The spirited and forcible manner with which your valuable journal has directed attention to the existence of great abuses in the matter of awarding diplomas at Louisville, and other medical colleges, merits the commendation of a profession which is being prostituted. These schools deem thoroughness of knowledge to be unessential, and by their *forcing* process produce a mushroom growth in our medical field, that can live only in the soil of charlatanism and imposture. In the Record of April 1st., you quote from the editor of the *American Medical Weekly* (Dr. Gaillard), to the effect that any one can spend five months—the usual winter course of study—at any college, and at the expiration of the term, in

March, can enter the Long Island, or Cincinnati colleges, or the University of Virginia, and graduate in medicine in the following June—after only nine months' instruction! You seem to place confidence in this affirmation, and, in so far as it relates to the colleges at the first two named places, it may be true. But Dr. Gaillard does not appreciate, or give credit for the vast difference between the requirements for graduation at the University of Virginia, and at the other places, and between their courses and modes of instruction. I do not believe you would wittingly aim a blow at the University of Virginia, through her medical department,—and yet you seem to do so in commenting on Dr. Gaillard's statements, when you declare that there is no reason to doubt their accuracy! His statement savors of truth, but leads to error. It is true, that an intelligent man *can* graduate in nine months at the University of Virginia, but it requires excessive labor, and few accomplish it. Graduation there does not depend at all on the time one has studied,—whether that be six months, a year, or six years – but depends on merit, as developed by the ordeal of rigid written examinations. The term there is nine months long, and there is no such thing as a "Summer Term." The University makes no boast of clinical advantages; but she does drill her students, and prepares them with conscientious thoroughness to appreciate and understand morbid states and therapeutic indications. The untutored, unprofessional mind is incapable of appreciating intelligently "Clinics," nor are they a *sine qua non* of success. There, under the guidance of talented professors, a firm foundation of medical knowledge is laid, in each of the chief branches of medicine, during nine months, uninterrupted by Saturday or Christmas holidays. A man does not *then* secure his diploma after an examination of fifteen minutes duration on a branch, as he may in most of his sister city colleges, but each branch is honored by *a day*, and the result is shown in a graduation of about twenty-five per cent. of the applicants. What other college, anywhere, shows such a record? The noble old institution needs no laudation; and, when graded with institutions that sell permits to practice, she can proudly refer to her history, and charge ignorance, or malice, against her maligners! This communication, in vindication of the University of Virginia is evoked by the statement referred to. It is necessarily imperfect from brevity, but is written in all candor, under a sense of injustice by imputation, if not by affirmation, done an institution, the peer, at least, of any college in this country. Do not, therefore, speak of her course in graduating students as a "monstrous evil." Do not speak of her as a "so-called high place," in which "corruption" is going on; and level her with mercenary institutions at Louisville and elsewhere. Comparisons are odious to her! Pardon me for occupying so much of your space.

Very respectfully,

WM. R. DUBOSE,
Asst. Surg'n U. S. N.

DEATH CERTIFICATE FROM UNQUALIFIED PERSONS.

TO THE EDITOR OF THE MEDICAL RECORD:

SIR.—Perhaps you will consider the following questions of sufficient general interest to publish answers to them: When an attack of illness proves fatal in the case of a patient attended medically—till death by a person, (a druggist possessing no proper qualifications,) who has not a "Diploma," nor a "License;" can an undertaker remove the body for interment, without any infraction of the law of the State of New York, before a coroner's inquest has been held on the body? Can a person, unqualified for the practice of medicine, as above indicated, legally give a "Burial Certificate," over his own signature, to which is attached the title-initials "M.D." for the purpose of obtaining a permit, to allow the body to be conveyed for interment within the precincts of the city of New York? If to do so be an infraction of the law of this state, what, (if any,) is the penalty? W. M. D.

"SUBURB," MARCH 30TH, 1876.

[It is very clear from the foregoing statement, that the person who presumed to grant the certificate in question, had no possible right so to do, and is guilty of a misdemeanor which is punishable "by imprisonment, in the county prison, not exceeding one year, or by a fine not exceeding five hundred dollars, or by both fine and imprisonment."—ED.]

PERI-NEPHRITIC ABSCESS IN CHILDREN.

TO THE EDITOR OF THE MEDICAL RECORD:

SIR.—In the March 25th number of THE RECORD I see a notice of a paper read by Dr. V. P. Gibney before the "Medical Journal Association," on the above subject, in which he reported seven cases, the ages being respectively 8, 1½, 6, 9, 3½, 2½, 6, 10 and 2 years. He states that this affection had been denied by some authors, and that only three cases had heretofore been placed on record. Such being the case, it may be interesting to add one to the number, especially as it is probably the youngest one reported. The child, a patient of Dr. Isaac E. Taylor's, came under my care last summer, at Saratoga Springs, whither it had been sent by him on account of an obstinate affection of the stomach and bowels. It was then about five weeks old. The mother could not nurse it, and was trying to bring it up by hand. After trying various articles of food and various remedies with only partial success, a wet-nurse was procured, and the symptoms began to amend very soon. Previous to this, the child had had irregular fever; the temperature ranging from 100 to 104, rarely as high as the latter figure. It was in a good deal of pain at times, requiring anodynes; at other times quite free from pain, and looking cheerful, especially when out of doors. Sometimes congestion of the brain seemed to threaten, and the pupils were quite contracted when not under the influence of paregoric. Belladonna was then given with good effect. At one time, while I was absent, Dr. Marion Sims called in to see the patient, and subsequently saw it several times with me. One day, soon after we had left the child, the nurse called me back to say that she had discovered a "swelling" in the side. On examination, there was a tumefaction in the left side, below the cartilages of the ribs, in the lumbar region, both to be seen and felt; it was as large as a small orange, and fluctuated, being very elastic. A poultice was directed; and the next day it had increased in size, and fluctuated more distinctly. With Dr. Sims' approval, I concluded to puncture it; and Dr. Grant, of Saratoga, being called in, brought an aspirator, and aspiration was attempted, but failed. I therefore made an incision with a bistoury, and gave exit to about three ounces of healthy pus. A tent was placed in the wound, to maintain its patency. The next day the matter was running freely, and the child much better. Not to prolong the case, I will merely state that it was difficult to maintain the opening, and that it was enlarged once; and that when it did not give free vent to the fluid, the child was

invariably restless and feverish. Quinine, which had controlled the fever pretty well before the appearanc of the swelling. was continued for some time. The child continned in a very doubtful condition up to the time of its departnre for home; but by that time, some two weeks after the operation, the discharge had gradually diminished, until it scarcely amounted to a spoonful in 24 hours. But the tumor could still be felt, although smaller and not fluctuating. In November following, two months after it passed from under my care to that of Dr. Taylor, I saw the infant, and it was as fine and healthy a child as could be, and there was no appearance of the disease.

The very sudden appearance of the tumor in this case was remarkable. The child was stripped and washed daily, and the mother and nurse both watching it with great solicitude, and yet neither of them noticed any swelling until it assumed the proportions above described. The day after the puncture I made out the outlines of the tumor with great ease, and had no difficulty in diagnosing nephritic abscess.

Dr. Gibney is reported as regarding the "diagnosis of peri-nephritic abscess in the very young child as impossible." I presume he means before the appearance of any tumor.

PALATKA, FLA. FREDERICK D. LENTE, M.D.

PROFESSIONAL RESPONSIBILITY IN PRODUCING ABORTION.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—A man was arrested on a charge of attempting criminal abortion by the administration of aloes in whiskey. The attorney for the prosecution showed me some aloes which he had received from the woman. My opinion of its properties as an abortifacient was asked; I told the attorney that, under favorable circumstances, it was regarded as one of the principal drugs employed for that purpose, and more likely to be employed than any other, not excepting ergot. I related to him the following circumstance. Some four years ago, a married man applied to me for medicine to *make his wife's turns come regularly*, as he said, stating that it had been over three months since she had menstruated. I asked him positively if she was not pregnant; he replied that she was not. I prepared a compound, the basis of which was aloes; in the course of eight or ten days I was sent for in great haste to see her. When I arrived, I was shown a "something which had passed from her," as her husband said. I ruptured the sac and discovered a fœtus at least three months old; he asked if I thought the medicine did it; I replied not, but at the same time I believe that this fellow designedly misrepresented the condition when he got the medicine from me.

Now, in consequence of these expressions of mine to the attorney, it became generally known that I said aloes would produce abortion. This view seemed to prejudice the public against the defendant, and certain *interested* parties, upon the authority of *still more interested physicians*, endeavored to produce the impression that aloes would not produce abortion, and had never been known to do so. I desire to have an expression of your opinion as to the properties of aloes and other abortifacient drugs. New York is not the only town where abortionists flourish. Perhaps some of your readers can give their experience, or, rather, their observation.

Very respectfully,

C.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from April 9th to April 15th, 1876.

BY S. O. 71, A. G. O., April 8, 1876, the following changes are made:—

HAPPERSETT, J. C. G., Assistant Surgeon.—Relieved from duty in Department of the Missouri; ordered to Philadelphia, and report thence by letter to the Surgeon-General.

HUBBARD, V. B., Assistant Surgeon.—Ordered to Department of California for assignment to duty.

REED, W., Assistant Surgeon.—To accompany recruits to Department of California, and upon completion of this duty, ordered to Department of Arizona, for assignment to duty.

The following named officers are relieved from duty in the Military Division of the Atlantic, and ordered to the Department of Texas, for assignment to duty:—

GODDARD, C. E,, Surgeon.

COMEGYS, E. T., Assistant Surgeon.

SHANNON, Wm. C., Assistant Surgeon.

The following named officers are relieved from duty in the Division or Department where they are now serving: ordered before the Army Medical Board, in session in New York City, for examination for promotion, and upon its completion, to the Division or Department set opposite their names, for assignment to duty:—

MEACHAM F., Assistant Surgeon.—From Military Division of the Atlantic to Department of Texas.

STYER, Chas., Assistant Surgeon.—From Department of the South to Military Division of the Atlantic.

CORSON, J. K., Assistant Surgeon.—From Department of the South to Military Division of the Atlantic.

WEISEL, D., Assistant Surgeon.—From Department of the South to that of Texas.

KIMBALL, J. P., Assistant Surgeon.—From Department of Dakota to Military Division of the Atlantic.

EWEN, C., Assistant Surgeon.—From Department of the Gulf to Military Division of the Atlantic.

And the following, upon completion of their examination, to report by letter to the Surgeon-General:—

HORTON, S. M., Assistant Surgeon.—From Department of Texas.

JAQUETT, G. P., Assistant Surgeon.—From Department of the Platte.

WHITEHEAD, W. E., Assistant Surgeon.—From Department of Texas.

BUCHANAN, W. F., Assistant Surgeon.—From Department of Texas.

MCELDERRY, H., Assistant Surgeon.—From Department of the Colombia.

BENTLEY, E., Assistant Surgeon.—From Department of California.

GIRARD, J. B., Assistant Surgeon.—From Department of Arizona.

KING, J. H. T., Assistant Surgeon.—From Military Division of the Atlantic.

CAMPBELL, A. B., Assistant Surgeon.—Granted leave of absence for one month, on Surgeon's Certificate of Disability. S. O. 62, Department of Texas, April 8, 1876.

HALL, J. D., Assistant Surgeon.—Granted leave of absence for two months. S. O. 63, Military Division of the Atlantic, April 11, 1876.

HAMILTON, J. B., Assistant Surgeon.—Resignation accepted by the President, to take effect May 31, 1876. S. O. 71, A. G. O., April 8, 1876.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending April 15th, 1876. WALTER DE F. DAY,
Sanitary Superintendent.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
April 8th.....	0	7	91	4	59	100	40
April 15th.....	0	8	103	5	72	75	29

Dr. ALFRED L. HASKINS, a promising physician of Boston, was killed April 3, by a fall through the hall well of the Huntingdon House, at which place he went to see a patient.

THE BELFRY MURDER CASE.—Dr. E. Cotting contributes, in the Boston Medical and Surgical Journal, a very interesting medico-legal account of the Belfry Murder Case.

VENTILATION OF TOMBS PRISON.—Measures are being taken to ventilate the prisoners' quarters in the Tombs Prison.

THE ARMY MEDICAL STAFF BILL has passed the Senate, and its provisions are adopted by the Military Committee of the House.

THE SEWERAGE OF BOSTON is in a bad way. The necessary improvement will require so much money that public meetings are to be called to consider the subject.

SIR JOHN CORDY BURROWS, F.R.C.S. Eng., of Brighton, President-elect of the British Medical Association, died March 25, 1876, in the sixty-third year of his age.

NOXIOUS GASES FROM MANUFACTORIES.—A Royal Commission has been appointed by the British Parliament to inquire into the working and management of works and manufactories giving off noxious vapors and gases, and their effects on animal and vegetable life.

ANOTHER CASE OF MILK POISONING.—*The British Medical Journal* (April 1, 1876) says that cases of milk poisoning have occurred at Greenock, and that in twenty cases of enteric fever the disease was directly traced to contaminated milk.

INCREASE OF INSANITY IN IRELAND.—In their last annual report, the Lunacy Commissioners advert to the increase of insanity in Ireland. Between the three kingdoms, they observe, the authenticated number of mentally affected may now be set down as fully 90,000, or 18,000 more than in 1860. The commissioners, in view of these facts, strongly recommend the systematic study of insanity in the regular medical schools.

A DEATH FROM ETHER-DRINKING is reported from Draperstown, County Londonderry, Ireland.

A DEATH FROM CHLOROFORM during a dental operation is reported from Liverpool. The immediate cause was "arrest of the heart's action." The jury absolved the dentist from all blame. Commenting on this case the *British Medical Journal* says:—"Nitrous oxide gas has proved itself so efficient and so safe an anæsthetic agent for dental purposes, that the employment of a dangerous agent, such as chloroform, can rarely be justifiable; and if evidence to the effect were tendered, as it well might be, the jury might be expected to add to their verdict a rider which would be unpleasantly severe. The dentist who administers chloroform where nitrous oxide can be made to serve, incurs a very solemn responsibility."

A CONGRESS OF SCANDINAVIAN DOCTORS will be held in Gothenburg during next July. Articles intended for exhibition will be admitted duty free, if afterwards removed.

NEW STATUES IN THE COLLEGE OF PHYSICIANS IN LONDON.—Three statues have lately been placed in vacant niches in the entrance to the College of Physicians. Immediately over the doorway is that of Linacre, the projector and first President of the College, on one side that of Harvey, and on the other that of Thomas Sydenham.

H. CARRINGTON BOLTON AND THE "PAPYRUS EBERS."—Mr. Charles Rice, the author of the article on "*The Materia Medica of the Egyptians*," in our last number, informs us that the author of the account of the "Papyrus Ebers" in the *Tribune* was H. Carrington Bolton, Ph.D., of Columbia College, N. Y., instead of the late Librarian of the Astor Library, as stated.

THE DISCOVERY OF ANÆSTHESIA.—"In Mount Auburn cemetery, near Boston, there stands to-day a monument erected by loving hands to the memory of Dr. Morton. On the four faces of it there are inscribed, in order, the legends: "Inventor and revealer of anæsthetic inhalation. Before whom, in all time, surgery was agony. By whom pain in surgery was averted and annulled. Since whom science has controlled pain." In the light of the above record, which I believe I have stated with accuracy, and I know without prejudice or favor, I simply ask, are these inscriptions true? Modify the first so that it shall read, "Inventor and revealer of the anæsthetic inhalation of sulphuric ether," and not the most rigid constructionist can take exception to the statement, for such honor is assuredly due him, and will remain to the end of time. But can we even then reconcile the remaining legends with the impartial record of history? I fear not, and I believe, rather, that when the story of anæsthesia shall have been fully and finally written up, this verdict will be rendered in favor of the obscure dentist, whose memory has been neglected and whose name has been almost forgotten—*Dr. Horace Wells*, of Hartford, Connecticut."—Prof. E. S. DUNSTER, M.D., Ann Harbor, Michigan.

EFFECTS OF VEGETATION UPON HEALTH.—It is interesting to know that the sunflower, which will grow almost anywhere, and could be turned to various useful purposes, is one of the most valuable of sanitary agents, since not only is it ozoniparous, but also destroys deleterious miasmata. It should be noted, as a further proof of the good influence of plant culture on health, that while the manufacture of ozone is an independent work, carried on by the flowers alone, the green leaves are performing their sanitary function by extracting carbonic acid gas from the atmosphere, and helping to preserve that proportion in its elements which makes it healthful. More remarkable, perhaps, than all is the eucalyptus, of which we have recently

heard so much, and of which we shall soon know more. Thus the cultivation of flowers is a work not merely delightful and humanizing in itself, but one which, in a way most beautiful and picturesque, confers a positive benefit on society, so great that it can hardly be overrated, especially in large towns, where there must necessarily be so much to poison and deteriorate the air we breathe. It may be added that the sunflower thrives even in the heart of London, and that it is readily propagated from seeds sown in March or April. It is nearly allied to the common Jerusalem artichoke, which also grows in the smokiest of districts.—*Gardener's Magazine.*

Ophthalmic and Aural Institute, New York.—During the year 1875, 4,530 new patients were treated in the dispensary, namely, 3,662 for diseases of the eye, 758 for diseases of the ear, and 110 for diseases which were not classified. Three hundred and thirty-eight patients were treated in the hospital department. Of these, 98 paid the entire expense of their accommodation, amounting to from three to five dollars per diem; and, in addition, made such compensation for surgical and medical attendance as is customary in private practice. The aggregate number of days during which these patients were supported in the Institution was 1,126. One hundred and ninety-four patients, receiving an aggregate maintenance of 5,965 days, paid only in part for their accommodation; and 46 patients, receiving an aggregate maintenance of 1,006 days, were treated wholly without charge. The aggregate maintenance of all patients covered 8,097 days, and the average daily number of inmates in the Institute was 22⅛. The number of surgical operations—excluding those of minor importance—performed during the year was 420, of which 386 were for diseases of the eye, and 34 for diseases of the ear. The operations on the eye included 51 operations for primary cataract, 71 operations on the iris, 102 operations for strabismus.

From the time when the Institution was opened, in May, 1869, to the 31st of December, 1875, 23,482 patients have been gratuitously treated in the dispensary, and 1879 admitted to the house. During that time 2,701 operations have been performed. As heretofore, opportunities for theoretical and practical instruction both in ophthalmology and otology have been afforded to medical students and practitioners, and the patients of the dispensary and hospital departments have furnished ample illustration of the various diseases of the eye and ear. Systematic lectures and practical courses have at different times been given on the physical exploration of the eye. The following gentlemen compose the medical staff: Dr. H. Knapp, Surgeon; Dr. Thos. R. Pooley, Dr. Emil Gruening, Dr. Rudolph Gebser, Assistant Surgeons; Dr. Adolph Alt, Resident Assistant-Surgeon; Dr. W. F. Fluhrer, Clinical Assistant.

Dawson's *vs.* Piffard's Battery.—The accuracy of our report concerning the trial of Cautery batteries at the Journal Association having been called in question by Dr. Dawson, in a letter in the last Medical Record, we have personally investigated the two principal points which he raises, viz.: as to the relative size of plates used by him and Piffard, and the amount of fluid employed by each. We find that in both respects our report was correct, and consequently that Dr. Dawson was mistaken. Dr. Piffard's plates used on that occasion measured 5½+ inches and not 6½+5½, as stated by Dr. Dawson. Upon other matters, relating to the merits of their batteries, we suspend judgment until after the report of the committee appointed by the Journal Association to investigate the questions raised.

Quarantine Self-Supporting.—There appears to be a reasonable probability that the Legislature will do away with the present system of quarantine fees, and bestow upon the Health Officer a fixed salary. A bill having such an object in view, has been introduced into the Senate. It provides that hereafter all fees accruing to the Health Officer shall be paid to the Treasurer of the Board of Quarantine Commissioners, and be by him disbursed at the order of the Board, to the care and maintenance of the entire Quarantine establishment of the port. The Health Officer shall be appointed, as now provided, and receive $8,000 per year, and he may appoint his first and second assistant physicians, subject to the approval of the Quarantine Commissioners. The First Assistant shall be paid $6,000 per annum, and the Second Assistant $4,000. The Commissioners shall appoint, on requisition of the Health Officer, as many other assistant physicians, superintendents, and other employés as may be necessary. The Commissioners shall fix the salary of these appointees, and pay all the expenses of the establishment, but there shall be no appropriation made by the State for the care and maintenance of Quarantine, except for the salaries, clerk hire, and office expenses of the Commissioners of Quarantine. The Governor and Controller may from time to time reduce the revenues of Quarantine upon the recommendation of the Health Officer and the President of the Board. The Commissioners are required to make quarterly reports to the State Controller of receipts and expenditures, and to report annually the condition of the establishment to the Legislature. It shall not be lawful to use the boats or other appurtenances for pecuniary benefit to any official or employé. The Commission shall, with the consent of the Health Officer, select, licence, or dismiss all persons required to be licensed under Quarantine, and fix the charges for licenses. Additional regulations are provided for the management of the establishment. The Commissioners of Quarantine shall have power, subject to the approval of the Health Officer and Commissioners of the Land Office, to sell all property unnecessary for use. When such sales are made, a detailed statement of the same shall be rendered to the Controller of the State, and the proceeds immediately paid into the Treasury of the State of the property belonging to the State, otherwise the proceeds shall be devoted to the care and maintenance of Quarantine.

Medical Night Service in Paris.—From January 1, when this system was inaugurated, to March 1, 630 visits have been made by the physicians who offered their services to the prefectory of police.

Dr. Vleminckx, the President of the Belgian Academy, and the originator of the Vleminckx's Solution, which came into such extensive use on the Continent in the treatment of scabies, has just died at Brussels, aged 76.

Weekly Bulletin of Medical Societies.

Saturday, April 22.—Medical and Surgical Society.

Monday, April 24.—Medical Society of the County of N. Y.

Tuesday, April 25.—Yorkville Medical Association.

Wednesday, April 26.—New York Pathological Society.

Thursday, April 27.—New York Medico-Legal Society.

Friday, April 28.—Medical Library Association.

Original Communications.

LEUCOCYTHÆMIA.

BEING A PAPER READ BEFORE THE MEDICAL SOCIETY OF THE COUNTY OF NEW YORK, MARCH 27, 1876.

By EDWARD G. JANEWAY, M.D.,

PHYSICIAN TO BELLEVUE HOSPITAL, N. Y.

PART I.

THE subject to which the paper is devoted this evening is perhaps a little old and trite; and yet I feel that the members of the Society will pardon me for opening the discussion on this subject; especially so, as, of the three cases whose histories I will first read, and which have come under my care during the past two years, no previous diagnosis had been made, though they had presented themselves to those undoubtedly well acquainted with the literature of the subject. This circumstance has made me feel that some might entertain the idea that leucocythæmia was an infrequent disease, and hence be deterred from making that easy microscopic examination which would settle the diagnosis in any doubtful case.

In writing this paper, my endeavor has rather been to present some interesting facts about this disease—to give such statements as I could vouch for, as the result of the study of those histories which I had time to examine—than to offer a complete article on the subject. I rejected all cases occurring before the microscope was used, as they offered nothing additional to those observed since. Neither have I accepted all recorded since, some seeming to me a little doubtful. Such are many of the cases called by Prof. Bennett slight leucocythæmia. If I had been willing to accept such cases as illustrations of this disease, I might have added largely to the number which I could report as coming under observation with this complaint. They belong rather to the class of leucocytoses, due to some other disease.

The first case of this disease coming under my observation during the last two years was the following, brought to me by Mr. (now Dr.) Gordon. I presented the patient, and exhibited a drop of his blood under the microscope, to the members of this Society some time since.

C. P.; male; age, 32 years; married.

He had no occupation until he was 21 years of age. After this he was in the army for three years. Then for five years he was employed in a steel factory. There he was necessarily exposed to an extreme degree of heat for periods of twenty minutes' duration, and as soon as possible afterwards he would go into the open air. For the greater part of the three next years he was engaged in driving. The only taint in his family is due to the death of his mother from phthisis pulmonalis, after a two years' illness, at 35 years of age. His habits were regular. He, however, for a period of two years, some six years before I saw him, was in the habit of imbibing a good deal of ale.

The diseases from which he had suffered were swamp fever of several weeks' duration, twelve years before I saw him, and gonorrhœa and gleet, lasting nine months, three years later. The patient's present illness first manifested itself about three years before his first visit to me. At that time he had suffered from a pain in the left hypochondriac region, associated with shortness of breath. The physicians treated the disease as pleuritic, using blisters. The pain disappeared after lasting for a month.

Shortly after this time his legs became swollen, and an eruption appeared on them, due, according to his account, to heat. The disease was probably of an eczematous nature, as it was attended by a slight serous discharge.

About this same time, he noticed a lump under the free border of the ribs on the left side. As this lump increased in size he grew weaker. A cough would occur after eating and bring on vomiting. For some time he was troubled with constipation of the bowels. The appetite was unimpaired. His urine throughout was free and of large quantity. He had been subject for about four months to almost daily attacks of epistaxis; and for some time to dyspnœa on exertion, occurring to a less extent, even when quiet. This he stated was rather a sort of desire for breath than actual distress. Pallor had existed for one year. His strength had gradually decreased and the venereal appetite became weakened. He stated that he urinated seven or eight times a day, and was especially troubled by the desire when shaken up, as in riding in a car.

I saw him first in February, 1874. His stature was 5 feet 6 inches, weight 139 pounds—the same as when in good health. He was pale, though by no means remarkably so.

The abdomen was very much enlarged, and protruded more on the left than on the right side. The superficial veins were quite apparent.

Measurement of abdomen at umbilicus,	36	inches.
" " " " eighth rib,	34	"
" " chest at sixth rib,	32	"

Expansion of chest from 31½ to 33½ inches.

The apex beat of the heart was perceptible in the fourth interspace on the left side under the nipple. There were no physical evidences of disease of the heart or of the lungs.

Percussion of the abdomen showed dulness, which commenced above in the infra-axillary space at the seventh rib, left side, and descended so that the anterior border of the dull region corresponded to a point four inches to the right of the umbilicus, and then descended almost vertically into the pelvis.

The posterior limit of the dull region corresponded to a vertical line drawn through the anterior superior spinous process of the ilium. Back of this line tympanitic percussion note was present.

Palpation showed the region mapped out by percussion to be occupied by a flat, smooth tumor, firm to the feel, painless, and presenting two indentations on its anterior border. The tumor moved with respiration, and to a slight extent with movements of the body. A soft blowing murmur could be heard in the epigastric region when the patient lay on his back.

A microscopic examination of the blood showed a diminution in the number of the red globules, and as marked increase in that of the white. The latter bore the proportion to the former of about 1 to 4.

The colorless globules were round, granular or else undergoing amœboid movement. Their size varied from $\frac{1}{2500}$ to $\frac{1}{1500}$ of an inch. The majority were about $\frac{1}{2000}$. On the addition of acetic acid they showed from one to four nuclei. Those, with two or three, were the more numerous. There was no doubt that the tumor was an enlarged spleen. I advised Dr. Gordon to try cod liver oil, iron, phosphorus, ergot, quinine, and the drinking of fresh blood. These measures, tried at different times, were of no avail; save perhaps, that his health remained in about the same state until a short time ago

He has, while under observation, suffered from epistaxis, exhausting sweats lately, hemorrhoids, a distressing tension of the abdominal wall, and the same inconvenience as formerly mentioned, due to the pressure of the enlarged spleen on the bladder. He had when examined no retinitis nor any anæmic bruit.

The next patient was Bridget Ford, age 33 years; married.

There was no evidence of any hereditary tendency to disease. She first menstruated at fifteen years of age, was married at eighteen, and had eight living children born to her, of whom four are now dead.

For two years before her visit she had been troubled with pain in the left hypochondriac region, coming and going several times a day. For this pain she had been to physicians, some of whom had treated her for renal disease. For these two years her strength had been failing, and she had been growing paler. Three months before she had a miscarriage of a six months' fœtus, putrid when removed. A good deal of flooding attended the miscarriage. For seven months she had been troubled with varicose veins in the legs, and some five months before the veins in both legs gave way, owing to which she lost a large quantity of blood. Since the miscarriage she had complained of shortness of breath.

Three months before I saw her, she first noticed a lump in the left side, which had increased a good deal during this time. She had no impairment of her special senses, nor of her mental faculties. Her appetite was poor, but she had neither dyspepsia nor vomiting. Her bowels had a tendency to constipation. She had menstruated about three weeks before her visit, but noticed nothing about it except that it lasted two weeks.

December 23d, 1874. The patient was a thin, pale-faced woman, with a sallow complexion, possessing a slight tinge of yellow. Respirations 18 per minute; pulse 72 (sitting); temperature 99½° F. *Physical examination:* The lungs were normal; the heart was pushed slightly upwards; no murmur attended its action.

The abdomen: A large tumor occupied the left hypochondriac region, and extended from that point downwards, and to the right, so that its anterior border was on a line with the umbilicus, and its lower end descended a little below a line drawn from one anterior superior spinous process of the ilium to the other. Above it reached the sixth rib, and posteriorly, the anterior border of the quadratus lumborum muscle.

Measurement of the abdomen at umbilicus, 32¼ inches; at eighth rib, 32 inches. The tumor measured twelve inches in length, and ten in breadth.

The tumor was smooth, except that its anterior border presented two indentations, one of these situated at the umbilicus being quite deep.

The posterior border was rather more rounded than the anterior.

It felt rather firm, and could be grasped between the hands; and anteriorly, owing to the laxity of the abdominal wall, the hand could be passed under it. It was tolerably moveable, and changed its position somewhat on changes of the position of the body. Tenderness existed only at the margin of the ribs. The splenic dulness extended posteriorly only as high as the tenth rib, and on full inspiration could be depressed to the twelfth. The liver was perhaps a little enlarged.

Microscopic examination of the blood: There was a marked increase of the white globules. Twenty to twenty-five could be counted in the field of an ocular 3, Objective 10 (immersion), Hartnack. They varied in size from $\frac{1}{2500}$ to $\frac{1}{1000}$ of an inch. They were round, granular under high powers, and developed from one to five nuclei by the use of acetic acid.

They appeared to bear a relation to the red of 1 to 3, 1 to 5 under low powers, but by the use of the high powers, the proportion did not seem quite so great.

Patrick Gagarty; aged 47 years; married; a house painter by occupation. He has been a painter for twenty-one years. He has never had venereal disease, and was of regular habits, save venereal excess with his wife. He had had ten children, four of them still living. He had intermittent fever eighteen years ago, lasting ten months. He had no other illness until four years ago; then had small-pox, which produced enlarged glands under his jaw, on either side. He has never had lead colic nor any symptom of lead poisoning.

Two years ago he states that he was as healthy as ever. Then he had short breath and severe cough at the outset. The cough has continued. The pallor was noticed by his friends about three and a half months ago.

At the time of his admission to Bellevue Hospital he was very pale, and had two enlarged glands, one under either angle of the lower jaw, the right being rather the larger. The axillary glands were not enlarged, and the cervical only trifingly so at the lower part. The inguinal glands were a little enlarged; a careful examination of the abdomen failed to detect any glandular enlargement, if it existed. The lungs showed evidences of bronchitis, and of some œdema.

There was a plain basic systolic murmur affecting the heart, and one readily audible over the aorta, etc., of the cardiac systolic rhythm.

The spleen was five inches in vertical and six in transverse measurement, though probably still longer, owing to the upper and lower extremities being somewhat bent. The liver was slightly enlarged. Since admission he has had epistaxis, and some œdema of the legs, a moderate ascites, a febrile movement of slight intensity, and for a few days a severe diarrhœa. The number of his red globules is from two to three times as great as that of the white. The fibrin forms as usual. The white globules are, for the most part, of the small variety, many of them being only two-thirds of the size of the red. There are a number of the larger size, and these show the ordinary nuclei. The small variety either appear as apparently naked nuclei or non-nucleolated cells; or else as nuclei, with a very closely surrounding protoplasm.

A drop of the blood when he first entered the hospital looked like water containing a little reddish sediment. It had a faintly alkaline reaction.

These three cases are still living. The first has lately been growing weaker, and is developing a more marked cachexia. The second has improved without taking any special treatment. She became offended with me, owing to the prognosis which I gave her; and she has lately had no medical attendance, but follows her occupation of fruit peddler in the open air. I tried the other day to persuade her to allow me to re-examine the condition of the blood, but in vain.

The condition of the third is critical, though presenting a trifling improvement. In his case I used hypodermic injections of ergot, but without benefit. After a little an abscess was formed, and this medication had to be discontinued. The use of phosphorus produced diarrhœa, which came near carrying the poor fellow off. At present he is on nutritious diet quinine, iron, and stimulants.

The disease under consideration had an unhappy in

troduction to the profession, inasmuch as it led to a persistent quarrel and acrimonious dispute between Prof. J. Hughes Bennett and Prof. Virchow. Each claimed the credit for its discovery. The truth seems to me to be that Prof. Bennett, in October, 1845, published in the *Edinburgh Medical Journal* the history of a case, which he then called suppuration of the blood, with remarks. In November, 1845, Prof. Virchow published in Froriep's *Notizen*, the history of a case of white blood, with some remarks. He, in the same paper, alluded to a case observed by Lautner, called general pyæmia, and of which he entertained doubts as to the propriety of considering it as a case of pyæmia. The case, of which the post-mortem appearances only were given, had large liver and spleen; and in the latter an infarction, also lobular pneumonia, superficial cutaneous abscesses, and a large bed-sore.

Virchow, in the microscopic examination of his own case, recognized the cause of the white blood as being due to an increase of the colorless corpuscles, and spoke of the relation between the colored and colorless corpuscles as being the inverse of the natural, the colorless being the rule, the colored the exception.

Bennett, in his paper, tried to account for the pus in the blood, and said that these cells could not be white blood globules. I have consulted Bennett's original article, and Virchow's collected writings—"*Gesammelte Abhandlungen.*" Virchow published during 1846–47 new articles on white blood, with a collection of such cases as he could gather from the older and then recent literature. He also placed at the head of his article in the first volume of his *Archives*, the title "White Blood;" and, in parenthesis, after this, the name "Leukæmia." Since then the name Leukæmia, and the name proposed by Bennett in 1851, Leucocythemia, has been used to designate the disease in question.

This statement of the case I believe to be the fair one; and the inference which I have drawn from it is that Prof. Bennett was undoubtedly the first to record a case of this disease with a thorough microscopic examination of the blood, but that he fell into error in his interpretations of the facts; that undoubtedly the credit of offering a right explanation of the facts, and placing the disease on a proper basis, belongs to Prof. Virchow; that it is impossible to decide whether the publication of Prof. Bennett's case drew Virchow's attention more closely to the subject and led to the publication, in November, of a case observed on the 1st of August; that this is probable, is true from the fact that Virchow published Lautner's case, and did not, in that article, publish Bennett's, which was much more complete, and also because I cannot find that Virchow has denied reading of Bennett's case before the publication of his own. I prefer the term Leucocythæmia, proposed by Bennett, to the term Leukæmia, because the former is the more accurate. The white cell blood is better than white blood; because, whilst the blood in this disease always has an increase in the number of white corpuscles, yet the white color of the blood may not be very marked. Craigie seems never to have started any claim for the discovery of the disease. His case is recorded in the same article with Bennett's, precedes it, and in his remarks statements are made which would give him almost as fair a right to a claim as that of Prof. Bennett.

This disease may come on in an insidious manner and present many of its marked characteristics, before the patient is aware that anything more serious than a trifling malady is the cause of his ill health. In certain cases, however, it has a more sudden and distinctly characterized outset.

In looking over a large number of cases about this point, I found 45 which might be said to have begun insidiously; 16 which had a more definite origin, and 12 of which I was in doubt as to the class in which they belonged, either from imperfection in the history, or because they were on the border line. The histories, as recorded, leave the inquirer uncertain whether, in the absence of a definite examination, or some symptom continuous from a certain date, a febrile attack or pain in the side, or hemorrhage from some source, as detailed by the patient, should be received as the first decided symptoms.

This disease is usually divided into several classes according to the site of those morbid processes which stand in a probable causative relationship to it; viz., lienal or splenic—glandular—and, more recently, medullary or myelogenic, starting from the marrow of the bones.

The usual initiatory symptoms have been either pain in the left side, pallor and debility, or else hemorrhage from some source, though the latter has probably been the first circumstance to attract the patient's attention notably; an inquiry reveals the fact that, for some time before, debility or pallor or languor had existed. It is worth while to draw attention to the pain in the left side, because two of the patients whose histories I have presented to you had this as initial symptoms, and it was supposed to be due to a pleurisy, or neuralgia, or dyspepsia, or renal disease, or pleurodynia. In this early stage it is no doubt impossible to recognize the disease in many of the cases; yet an examination of the blood by the microscope and a careful physical exploration of the spleen would, I feel assured, have revealed a certain number of the cases to the medical attendant.

This pain is sometimes a sense of fulness; again, it has a more sharp character, and is very possibly due to an inflammation of the capsule of the spleen, especially as we shall see that this is an accompaniment of the disease in some cases. Where the pain gives rise to a sense of fulness, we may suppose that it is due to the effect of the pressure on surrounding parts, or perhaps on its own capsule.

In other cases, the patient has accidentally noticed a tumor in the left side, or has found lumps more or less rapidly increasing in size, in the site of the superficial glands.

The symptoms noticeable in a patient in whom the disease has made some progress are as follows: Pallor, debility, emaciation, dyspnœa, hemorrhages, dropsies, febrile movement, perspiration, diarrhœa, occasionally vomiting, cough, loss of appetite, retinitis occasionally, palpitation, difficulty of swallowing, and, as more infrequent, small abscesses, frequent micturition, salivation and stomatitis.

Let us first notice, however, the cases of sudden origin; then take up the consideration of the condition of the blood upon which a diagnosis of the disease rests; and afterwards treat more in detail the prominent symptoms. In these cases which I have called those of sudden origin, I mean rather that there has seemed to be a definite period of which one could say "then the disease began."

One* had a severe cold on a journey, and having been previously well, six months later had severe abdominal pain, diarrhœa, and noticed a lump in the left side of the abdomen. Another† had a swelling in the submaxillary region, spreading from one side to the other, accompanied by chills and febrile movement; recovered in eight days. Then patient first noticed a

* Mohr: Virchow's *Archives*, Vol. v, p. 51.
† Vogel: Virchow's *Archives*, No. 3, p. 505.

tumor in the abdomen, which rapidly increased in size.

A man 40 years of age* had a strong mental excitement, and a little later noticed a swelling on the right side of his neck, which rapidly increased.

A man † had pain in the left hypochondriac region, intermittent, and of a shooting nature. He soon noticed some enlargement at the seat of pain.

Perhaps the most marked cases of acute origin and course are those recorded by Robert Patterson, in the *Edinburgh Medical Record*, 1870, p. 1073. The symptoms seem to have come on a little over a month before confinement, and to have caused death on the eleventh day after in one case; and in another to have begun earlier in the pregnancy; but, as far as the glandular part was concerned, to have taken a rapid increase succeeding confinement, producing death on the fourteenth day after.

The condition of the blood in this disease constitutes its most distinguishing feature. It consists in an increase of the number of the white globules, a decrease in that of the red; and, in addition, a corresponding change in its chemical composition, together with other less constant alterations of this nature.

I have already described the appearance of the blood in those cases whose clinical histories I read.

The coagulation of the fibrin took place in those cases as usual, and in the last its threads could be seen very readily, owing to the paucity of corpuscular elements.

The proportion of white to red in my cases was as follows: No. 1, 1:4, or nearly so; No. 2, 1:3 to 1:5; No. 3, 1:2 to 1:3. The proportion in other cases has been somewhat varied, as, for example: Vogel, 1:2, 1:3; Uhle, equal—at one time later, 1:3, 1:5; De Purry, 1:7, 1:12, 1:19, 1:24; Mosler, 1:18; Mosler, 1:30; Jacubosh, 1:4; J. Reenke, 1:1; Blache, 2:1; Bryant, 1+:1.

Many of the cases are reported as follows: "Great excess of white;" "great numbers;" so many on the field of a given objective and ocular of a microscope, etc.

As regards chemical analysis:

	Scherer.	Vogel.	Bennett.	Robertson.	Bennett.	Benhett.
Water	791.7	815	854		833.8	828.97
Solids	208.3	185	145.5		166.2	171.03
Organic	197.3					
Inorganic	11.084					
Iron	.0298					
Earthy phosphates	.0598					
Fibrin		4.46	6		3.2	3.83
Iron of ash		3.42				
Weight of blood globules		97.4	67.5		82.3	79.33
Organic					70.4	80.54
Inorganic					10.3	7.32
Solids of serum		82.35	72		80.7	87.87

Besides these analyses, Scherer records that he found formic, lactic and acetic acids, and hypoxanthin (8 to 10 grs. in 4 oz.)

Vivid records that he found in 1,000 parts only 37 of albumen, instead of the normal quantity (76 to 80).

Koerner (*Virch. Arch.*, vol. xxv., p. 147) found in the blood from the living subject, that lactic and formic acids, albumen, gluten, uric acid, and hypoxanthin were present. Acetic acid and leucin were not found.

Folwarczny, quoted by Mosler and Koerner: Blood from a living subject contained lactic and formic acids. Gelatin, leucin, and hypoxanthin were not present.

The same blood, *post-mortem*, showed formic acid in all specimens; lactic in most; uric acid in minimo (jugular vein); tyrosin; leucin, in aortic and capillary blood; hypoxanthin only in the blood from the splenic vein; acetic acid do.; gelatin not found.

In that type of the disease in which the disease is limited to the spleen, the majority of the white globules are large, and have the ordinary appearance. In those in which the lymphatic glands are alone diseased, the majority of the white globules are small, and resemble in appearance the lymphatic gland cells, according to the German school. [This fact is, however, denied by good observers, as Cornil, and Ranvier, and Wilks.] Some have described transition forms of white to red globules. In none of my cases were such present. Ranvier could not find them. Geo. Fuller, of London, was the first who examined a drop of blood during the lifetime of the patient, and thus established a diagnosis. Mosler wrongly gives the credit to Vogel.*

* Eddow's British Medical Journal.
† Mosler: Virchow's *Archives*, vol. xiii. p. 444.

* See *Lancet*, 1846, vol. ii. p. 43; Mosler, *Leukæmia*, vol. viii., part 2, p. 150, of *Ziemssen's Cyclopædia*; and Mosler, *Leukæmia*, p. 10.

TWO CASES OF ŒSOPHAGOTOMY,

FOR THE REMOVAL OF ARTIFICIAL TEETH.

By LEROY McLEAN, M.D.,

SURGEON TO TROY HOSPITAL, N. Y.

CASE I.—TOOTH PLATE SWALLOWED DURING SLEEP—SUCCESSFUL REMOVAL BY ŒSOPHAGOTOMY.—I. C., aged 30 years, a man of temperate habits, good health, and a book-keeper by profession, while visiting friends in Greenfield, Mass., in August, 1874, during sleep swallowed a gold tooth-plate, with one false central incisor attached. The plate, which was crescent-shaped, measured, from point to point, one and one half inches, and one-half inch from outer to inner edge. On the outer edge were eight sharp and irregular projections which fitted between the teeth and held the plate in position; these, from use, had become worn, and allowed of its easy removal.

He had retired at 11 P.M., and slept until 5 A.M., when he was suddenly awakened, experiencing a sense of suffocation, and a burning pain in the throat. He sprang from bed, drank a little water, and, feeling somewhat relieved, retired again. He then, for the first time, missed the plate from his mouth; and immediately realizing his condition, called for assistance.

Physicians were summoned, who made many fruitless attempts to dislodge the foreign body, finally concluding that it had passed into the stomach. He returned to his home in this city on the 29th, the day following the accident, and was attended by his family physician, who also entertained the opinion that the plate had passed down. His condition not improving, I was called in consultation on the evening of September 1st. Found him very weak and suffering intense pain; his face was haggard, and bore an anxious expression; the neck, which was swollen and in-

flamed, could not be moved without causing pain. Since accident has been unable to swallow without much suffering; and to obviate this as much as possible, the saliva, which was secreted profusely, was allowed to trickle from the mouth. Voice faint and husky; has been unable to speak above a whisper since day after accident.

I passed a pair of large œsophageal forceps, and could easily grasp the foreign body, which was apparently at the junction of the pharynx and œsophagus, but the application of much force to dislodge it was deemed impracticable, owing to the many points of resistance which the sharp projections on it offered. An operation (œsophagotomy), was then proposed. The patient readily assented to this, and an appointment was made for ten o'clock the following morning.

Chloroform having been administered, the patient readily yielding to its influence, the neck was stretched, and an incision made on the left side, midway between the margin of the sterno cleido-mastoid muscle and the thyroid cartilage, extending to within one-half inch of the sternum. The parts containing the carotid were then separated from the trachea and held aside by retractors, as was the left lobe of the thyroid body after careful dissection. The inferior thyroid artery having been exposed and pushed aside, the œsophagus was plainly seen. A large-sized lithotomy staff was then passed through the mouth, it being more easily introduced than a stomach tube, and the œsophagus pushed well forward and to the left. This served as a guide, and held the œsophagus in position, rendering the incision into it less difficult than it would otherwise have been, owing to the spasmodic efforts at swallowing which were very frequent after the administration of the anæsthetic. The incision was made longitudinally over the staff to the side of the cricoid cartilage; a finger introduced, and the plate, which was strongly impacted, removed with some difficulty from its resting-place behind the thyroid cartilage. The wound in the œsophagus was not closed. But two small arteries, muscular branches, were tied during the operation. Morphia was administered hypodermically, and the patient put to bed in a cool room.

During the first day enemata of beef-tea were given and bits of ice allowed to dissolve in the mouth. After twenty four hours enemata were discontinued, and he was allowed to drink milk, one-third escaping from wound.

Forty-eight hours after operation, could swallow fluids readily, very little passing out through opening. Fourth day ate an oyster, swallowing it without experiencing pain. Fifth day sat up, dressed, could readily swallow soft solids,—no discharge of fluids by wound. Sixth day, which was warm and pleasant, he walked about upon the piazza and around the house.

On the 18th sixteen days after operation, he visited his friends in Greenfield, returning and resuming business on the 22d, twenty days from date of operation—wound closed.*

Nov. 3d, went to New York, and was treated by Dr. Elsberg with the hope of regaining his voice. Returned unimproved. Again in February visited New York and consulted Dr. E. and was under treatment for one month, returning with voice much stronger. From that time there has been a gradual improvement, and at this writing the voice has about reached its natural standard.

* For assistance in this operation I am indebted to Drs. Ward, Cutler, Whitson and Wentworth, of this city.

CASE II.—TOOTH-PLATE IMPACTED IN CARDIAC PORTION OF THE ŒSOPHAGUS ELEVEN MONTHS AND SEVEN DAYS, CAUSING STRICTURE.—December 5th, 1873, Mr. P., living near Saratoga, while at dinner dislodged four upper false teeth, attached to a silver plate, by striking them with his fork. They were involuntarily swallowed, passing into the œsophagus.

Vomiting followed, and the plate was frequently felt rising in his throat, only to fall back again. The plate was one and one-half inches broad by about one inch in depth from front to rear.

In the evening, about five hours after the accident, Dr. Chapin arrived from Glen's Falls, a distance of six miles.

Owing to the irritation which the foreign body had already created in the œsophagus, the patient was chloroformed and an attempt made to reach the teeth. Instruments were passed down over ten inches, but failed to give any indications of touching them.

There was occasionally vomiting, but no more rising of the teeth in the throat, leaving the inference that they might have passed into the stomach. This was strengthened by a sharp and severe pain, which the patient felt in the region of the stomach.

Most of the soreness that had been caused by the accident gradually passed away, and in a fortnight or so he was enabled to swallow liquids without difficulty, and most kinds of food with varying success.

He frequently passed weeks without any marked inconvenience. A few weeks after the accident, Mr. P. served on a jury in Saratoga county, and resumed his business, that of a gentleman farmer, frequently doing his share of the work in the field.

Oftentimes, however, he would have unusual distress in the chest, or a return of the difficulty of swallowing food. He first consulted me in June, 1874, about six months after the accident. I passed an ivory-tipped probang, and found that they were still in the œsophagus, eleven and one-half inches from front of upper jaw, while the head was thrown back.

I strongly advised an operation, œsophagotomy, if a trial at removal by the mouth failed. This he wished to delay, as he said he felt "pretty well," and suffered no essential inconvenience. He afterwards went to Albany and New York for advice. Some of the physicians he saw recommended an operation, while a majority entirely discouraged it.

Thus the case was left to him and his friends, and nothing was done till November 10th; when, having had, for some weeks previous, more trouble in swallowing than usual, I was sent for. Upon arrival I concluded to attempt the removal of the plate through the mouth. It being beyond the reach of forceps, I passed a whalebone probang with swivel hook end, beyond the obstruction, and on drawing back it caught on the plate, but no reasonable force could dislodge it. On attempting to withdraw the instrument, it was found to be so thoroughly entangled with the object that for a time doubt existed as to its removal without an operation then. However, it was finally freed and the scheme of removing the plate in that manner decided to be impracticable. This was the first and only attempt made to dislodge them. The 12th was then appointed for an operation. This was eleven months and seven days from date of accident.

The operation was performed at 11 A.M. The patient having been etherized, an incision was made upon the left side of the neck, commencing opposite the thyroid cartilage, midway between it and the sterno cleido-mastoid muscle, and reaching to the sternum.

Careful dissections were made with a director,

down to the œsophagus, which was reached without difficulty. A large lithotomy staff was then passed through the mouth and the œsophagus pushed well forward, exposing its posterior wall, thus enabling me to avoid the inferior laryngeal nerve in making my incision into it. An incision large enough to admit the index finger was made into the œsophagus as near the top of the sternum as possible. I passed my finger through the opening and down, and was able to feel a constriction, below which lay the foreign body quite out of reach. I then directed with my finger a pair of polypus forceps down upon the plate, and after many vain attempts brought it up, but without the teeth, they having become detached in the effort at removal. The forceps were again introduced and the teeth felt, but before they could be grasped they passed into the stomach, and were voided by the rectum some days after. During the operation the inferior thyroid artery and one or two small branches were cut.

The wound in the œsophagus was not closed. A wet compress was laid over the line of incision and secured by bandage.

No anodyne was required after the operation, the patient suffering but little pain. Within twenty-four hours he swallowed milk, without much trouble and little loss. Thirty-two hours after, he drank half a pint of coffee without losing a drop. From that time there was a rapid improvement in his condition, all symptoms of stricture passing away, and at this date he is enjoying good health.

The voice was not injured by the operation.

I am indebted to Dr. Chapin, of Glen's Falls, for after-treatment and for practical assistance in the operation. Also to Prof. Cheever, of Boston, for essential information obtained from his invaluable monograph upon œsophagotomy.

Progress of Medical Science.

Chloroform as an Anæsthetic in the Treatment of Fissure of the Anus.—M. Nicaise has met with two cases in which four or five inhalations of chloroform, given before performing forcible dilatation for fissure of the anus, produced complete anæsthesia, without any preceding stage of excitement. In both, the operation was rapidly performed, and the patients quickly awoke. In a third case, the anæsthesia also came on rapidly without any stage of excitement, but after the dilatation was performed the patient was found to be in a most alarming condition. The thorax was absolutely motionless, without the slightest respiratory movement, the face pale and without the least muscular contraction, and the pulse very feeble. After the use of the ordinary methods, the patient regained consciousness somewhat, but she soon fell again into the same adynamic condition. This was repeated twice: and it was only after three-quarters of an hour of constant effort that the respiratory movements were permanently re-established. M. Nicaise attributes this susceptibility to the action of chloroform to the well-marked nervous condition that accompanies intolerant fissure of the anus. This susceptibility does not seem to be present in all who are suffering from fissure of the anus, but the fact of its sometimes existing should lead to great cautiousness in the use of chloroform.

M. Guyon, on the other hand, has met with several cases of fissure of the anus, in which the stage of excitement during chloroformization was prolonged and laborious, and the amount of the drug used consequently large. None of his cases proved fatal; but still the symptoms were so serious, that he has renounced the use of chloroform when performing forcible dilatation. He modifies the operation of Maisonneuve, by performing it as rapidly as possible, without attempting to avoid tearing the tissues.—*Gazette Médicale de Paris*, March 18.

A Case of Bulbar Paralysis Successfully Treated.—A patient, aged fifty years, entered the Vienna Hospital, on April 6, 1875, giving a history of cephalalgia, and pains in the nape of the neck and in the breast, especially when speaking aloud—these symptoms having lasted a year. There were no indications of apoplexy or embolism. Eight days before admission, the phenomena of bulbar paralysis appeared. On admission, the patient could not pronounce the vowels, and the movements of the lips were abolished. The paralysis of the soft palate and pharynx was not as marked as that of the lips, and the dysphagia was not very great. The laryngoscope showed diminished tension, but not paralysis of the vocal cords. The pathological lesion was agreed to be degeneration at the point of origin of the hypoglossal nerve. The treatment consisted at first in the application of strong induced currents to the external parts corresponding to the floor of the mouth, and galvanic currents from the battery of Siemen Halske containing 20 to 25 cells, the copper pole being held over the occiput and the zinc applied externally over the pharynx or œsophagus. Later on, the tongue was faradized directly. On the third of October the patient was discharged cured.—*Allg. Med. Central-Ztg.*, No. 4., 1876.

Osteotomy in Rachitic Deformities.—M. J. Bœckel, of Strasbourg, has performed this operation nine times, always with success, and has also collected the statistics of thirty-four cases in which it was performed in England and Germany. The operations were done on patients varying between the ages of fifteen months and seven years. M. Bœckel first tries manual reduction, which succeeds if the bones are still soft; if they are too hard he endeavors to break them by the ordinary methods of osteoclasty; if this also fails, he cuts down to the periosteum and peels it off the bone, which is then divided by the chisel and hammer, the saw being never used, for fear of future complications. The wound is then dressed by Lister's method, and reduction performed when it is cicatrized. Billroth does not completely divide the bone, but only incises it deep enough to render the reduction easy. When the curvature is antero-posterior, it is necessary to excise a piece of the bone before reduction can be performed. M. Perrochaud, of Berck-sur-mer, finds that the most marked distortions can almost always be cured between the ages of two and five years; in patients from eight to fourteen years old the cure is more difficult; while in those above fourteen it is very rare. His treatment consists in sea air, sea-baths, good nourishment and phosphate of lime, forty-five grains with two spoonfuls of sea-water internally every day. He uses no apparatus, but lets the children play about freely on the sea-shore, using crutches if necessary. M. Panas, while admitting that osteotomy is sometimes abused, thinks that, if the patient has passed the age of fourteen, if its deformity is evidently incurable by any other means, and if it renders existence distressing and difficult, the operation is certainly admissible.—*Journal de Méd. et de Chir.*, March, 1876.

Resection of the Large Joints and Lister's Dressing.—M. Verneuil recently communicated to the Société de Chirurgie, in the name of M. Saxtoph, of Copenhagen, the histories of four resections of the shoulders, four resections of the hip, two of the knee, two of the carpus, and one of the elbow, among which there was only one fatal case. All the cases were dressed according to Lister's method, and the one fatal case could, he thought, be traced to an imperfection in the dressing. Since this method was introduced, purulent infection had disappeared from his wards, and cases of erysipelas were very rarely met with. M. Boinet stated that he had seen Demarquay employ Lister's method, but without success. According to M. Lucas-Championnière, however, Demarquay did not apply the dressings properly. L. regarded the drainage tube as an integral part of Lister's dressing, not to carry off pus, but the excess of serum, and so prevent the occurrence of tension. He denied that other methods of treatment produce equally favorable results. The union of almost the entire wound by first intention, without suppuration, occurred in his experience with extraordinary promptitude under this treatment.—*Journal de Méd. et de Chir*, March, 1876.

Lymphorrhagia Consecutive to Suppurative Adenitis and Lymphangitis.—The following are the conclusions of a paper on this subject by Dr. Deprés:

1st. Suppurative adenitis and suppurative lymphangitis are generally followed, for twenty days after the opening of the abscess, by a flow of lymph that retards the cicatrization of the incision.

2d. This flow of lymph may assume enormous proportions, and constitute a *lymphorrhagia*.

3d. The lymphorrhagia consecutive to a suppurative adenitis is more considerable than that following a suppurative lymphangitis.

4th. The more or less abundant lymphorrhagia is the real cause of the fistulas consequent on suppurative adenitis in healthy or scrofulous subjects.

5th. Compression, where it is applicable, arrests the lymphorrhagia in a few days; and where compression cannot be used, cauterization will arrest it, but more slowly.

6th. The flow of lymph and the lymphorrhagia after suppurative angeioleucitis and adenitis are a perfect demonstration of the primitive lesion of the lymphatic glands and vessels, and confirm the theories of Velpeau on this point.

7th. Finally, it follows from the above, that compression applied for several days in suppurative adenitis and angeioleucitis is the best means of preventing the occurrence of lymphatic fistulas.—*Gazette Médicale de Paris*, March 18th.

The Fœtal Souffle.—M. Pinard, *chef de clinique*, after noting the results of auscultation in pregnant women, with the view of determining the fœtal souffle, prepared a series of umbilical cords which he classified as follows:

1st. Cords from women in whom no other than the uterine souffle had been heard.

2d. Cords from women in whom only a pulsatory murmur with maximum over the fœtal heart was heard.

3d. Cords from women in whom he had made out a transient fœtal murmur, with its maximum sometimes over the site of the fœtal heart, sometimes at a greater or less distance from it.

4th. Cords from women in whom he had heard a simple, permanent murmur, with its maximum removed from the fœtal heart.

5th. Cords from women in whom he had heard a double, permanent fœtal souffle, with its maximum at a distance from the fœtal heart.

These cords were washed, insufflated, dried, and then examined for valves, with the following results:

In the cords of the three first categories, there were no traces of strangulation, and no folds, either semi-lunar or diaphragmatic. The vessels of some were almost rectilinear, of others more or less spiral, presenting rudiments of valves, either in the vein or the arteries, or perhaps a slightly moniliform appearance.

In the fourth category, which comprised but three cords, he found falciform, semi-lunar, or diaphragmatic folds, sufficiently large to obstruct a third, a half or even more of the lumen of the vein. The arteries presented constrictions, but the folds were absent or scarcely visible.

In the fifth category, which contained five cords, numerous well-developed folds, sometimes semi-lunar, sometimes diaphragmatic, were found, both in the vein and the arteries, and some of them obstructed at least three-fourths of the lumen of a vessel. These valves were most numerous close to the placental insertion of the cords.

In face of these results, the relation of cause and effect can hardly be denied, and from them the following conclusions may be formulated: When auscultation is carefully practised on the pregnant female in the latter half of pregnancy, three varieties of fœtal murmurs may be heard:

1st. A murmur corresponding to the first sound of the fœtal heart, which is muffled instead of being sharp and distinct. This is a cardiac murmur, is permanent, and disappears some hours or days after birth.

2d. A murmur with its maximum at a greater or less distance from the fœtal heart. This is a funicular souffle, which may be single or double, and is due to the presence of well-developed semi-lunar or diaphragmatic valves, either in the vein or the arteries, or in both varieties of vessels together.

3d. A single, transient murmur, isochronous with the pulsation of the fœtal heart, but stronger than either of the above varieties. This funicular souffle is due to a passing compression of the elements of the cord, either by the fœtal parts themselves or by the stethoscope.

In a note, the author states that, though he has examined some hundreds of cords, he has never found true varicosities of it, but only a moniliform appearance, due probably to constrictions of the vein or arteries.—*Gazette Médicale de Paris, March 18th*, 1876.

Uterine Calculus.—Dr. Luigi Felici was recently called on to treat a young woman, aged 31, who has been suffering for some time from irregular but abundant hemorrhages, pain in the back and other symptoms of uterine derangement. Digital and specular examination revealed a calculus fixed in the cervix uteri, and which was easily removed. Dr. Berti, in presenting the specimen to the Palermo Academy of Médicine, maintained that the existence of uterine calculi must be admitted, because their macroscopical, microscopical and chemical characteristics differentiated them from degenerated and calcified neoplasms. —*Gazette Médicale de Paris, March* 18.

The Entrance of Air into the Veins.—M. Couty has recently performed a series of experiments on this subject, from which he has deduced the following conclusions:

1. Air, after penetrating into the veins, does not pass into the vertebral arteries; even if it did, the phenomena would be the inverse of those actually

observed; the arterial tension would be at first increased, and not diminished.

The air does not paralyze the right side of the heart; mechanically and chemically, it excites it to contract, and the action of the heart continues until after the voluntary and respiratory muscles have ceased to act.

The arrest of the circulation is not due to an obstruction of the pulmonary capillaries by the air. Such an obstruction might produce a diminution of the aortic wave, but not the almost instantaneous arrest of it that sometimes occurs.

II. After disposing of the above ancient theories, he divides the symptoms of the accident into four periods, as follows:

First period.—Diminution of the aortic wave and fall of arterial tension; accelerated action of the heart.

Second period.—More decided diminution of tension; accelerated respiration; syncope, with falls, cry, pallor, dilatation of the pupils, etc.

Third period.—Aortic current almost *nil*; irritation of all the motor nervous centres; contraction and convulsive movements of the voluntary muscles; contraction of the involuntary muscles; evacuation of the urine and fæces; finally, very slow, deep and apoplectic respiration.

Fourth period.—Arterial tension *nil*; death of the brain and cessation of the convulsions; then, arrest of the respiration; last of all, cessation of the heart's action.

The general symptoms of the second and third periods, caused by anæmia of the nervous centres, will occur more or less rapidly, according to the rapidity with which the air is introduced, and will be more or less marked, according to the condition of the animal.

III. The air arrests the pulmonary current by a mechanical interference with the heart's action. It accumulates more or less rapidly beneath the convex wall of the organ, and, by virtue of its elasticity, distends the very expansive walls of the right ventricle, until the volume of the cavity is double or three times the normal. On this distention all the consecutive phenomena depend.

1st. The force of the heart's contraction remaining the same, while the resistance augments with the distension of the right walls, the auriculo ventricular contractions, normally incomplete, become more so, especially in the auricle.

2d. The walls, contracting on a gas instead of a fluid, compress, instead of driving it forward.

3d. The orifices of the distended right heart gape widely, and the auriculo ventricular contractions force the air through them into the venous system, even as far as the crural and encephalic veins. This voluminous inverse current begins as soon as the cardiac distension passes certain limits, and in fatal cases lasts until the cessation of the heart's action. To sum up, the air distends the cavities of the right side of the heart, and this distention, like other dilatations of the same cavities, produces cardiac asystole, with diminution of the aortic current. This asystole, however, is of a special nature; it is acute, sudden in its onset, and may be so marked that the pulmonary current is almost instantaneously cut off.

After discussing the various therapeutic measures proposed for this accident, the author recommends especially two: blood-letting, which, in diminishing the venous pressure, diminishes also the cardiac distension, and is useful in all cases; and inhalations of oxygen, which, by causing exosmosis of the nitrogen dissolved in the blood, facilitate the dissolution of the air which remains accumulated in the right heart.

These experiments have proved beyond doubt that the entrance of air into the veins, an accident very complicated in appearance, can be resolved into two functional derangements—one local and entirely mechanical, *i. e.*, distention of the cavities of the right side of the heart, producing cardiac asystole; the other general and consecutive, *i. e.*, the slowing or arrest of the circulation.—*Le Mouvement Médical, February* 19.

On the Influence of Erysipelas on Syphilis.—A case is reported by Dr. A. Dealma, of Freiburg, which appears to support the opinion of numerous French observers as to the curative action of erysipelas upon syphilis. A patient was received into the hospital on Nov. 25th, in the sixth week of a maculo-papular syphilide, which covered the whole body and was accompanied by high fever. There were also chancres on the foreskin, and other syphilitic manifestations. In addition to this, the patient had long had a chronic inflammation of the left elbow joint with fistulous openings. He was given four small hypodermic injections of corrosive sublimate on successive days, which produced no appreciable effect upon the eruption. Then, on Dec. 3d, an operation was performed upon the diseased elbow-joint to improve the position of the arm, and within a few hours he was found to have erysipelas in that region, doubtless contracted from another patient. This disease extended, and lasted with considerable severity until Dec. 19th, when it subsided. But as early as Dec. 10th, the seventh day of the erysipelas, all traces of the syphilis, with the exception of faint pigmentation of the skin, had wholly vanished. He remained free until Jan. 17th following, when a scanty roseola appeared, without fever. It affected no place, however, which had been the seat of erysipelas. Again, on Feb. 4th, there was a mild attack of erysipelas, followed on the 7th by a new and complete disappearance of the syphilitic eruption. The patient had no further manifestation of syphilis up to the August following, and meanwhile his general condition was so good that in March a resection of the elbow-joint was performed with an entirely satisfactory result.—*Vierteljahrsschr. für Derm. und Syphilis, III.*, 1, 1876.

Permanent Change in the Color of the Hair and Skin after Scarlet Fever.—Dr. Wallenberg, of Dantzic, reports the case of a young man of twenty-one, who had an attack of scarlet fever followed by an unusual desquamation, in which over almost the whole surface of the body the epidermis was raised by exudation from the rete Malpighi, having this exposed in places as large as the palm of the hand, and in places covered with mucous crusts. Some small abscesses also formed. Subsequently he lost completely all the hair from every portion of the body; and where it grew again, instead of being dark brown as before, it was white, as in an Albino. The tint of his skin, too, changed from brownish to milk white, with a reddish tinge. The microscope also showed its condition to be completely analogous to that of the Albino. The cause of this loss of color, which has now lasted seven years, Dr. W. attributes to the destruction of the pigment cells of the skin and hair-cells by the profound inflammatory action. The skin has also remained extremely irritable, as shown by the occurrence of several outbreaks of general eczema after comparatively slight irritations.—*Vierteljahrsschr. f. Derm. u. Syphilis, III.*, 1, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, April 29, 1876.

THE NECESSITY FOR STATE BOARDS OF HEALTH.

THE necessity for State Boards of Health can hardly be questioned when we consider how much benefit may be derived from them. In a previous article, in which we proposed a simple plan for the organization of such boards, we only hinted at the good results which might follow. Let us, for the sake of continuing the discussion upon the general subject, glance at some of the more palpable reasons why such an organization is needed. As before remarked, there are a great many districts in this and in other States which have no sanitary provision for the emergencies of an epidemic, or for the prevention of those telluric influences which are so invariably found to associate themselves with high death rates. It must be admitted that considerable sanitary regulation could be enforced by a special board acting under the authority of the State, and created for an emergency; but if we look at the matter merely from this point of view, we must be satisfied with only a temporary remedy for unsanitary conditions in these localities. We are, however, under the authority of a general state board, able to extend the benefits to sanitary regulations far beyond these requirements. The State itself can be made the theatre of the operation of the general board, after the same manner as are the larger towns by their respective local boards. Here the broad principle of the common good is made paramount to local or individual interests. Take, for instance, the much vexed question of drainage on a large scale, and the great benefit which its proper and systematic regulation might effect. In this as in every other State there are lands which are little better than pestiferous swamps, which, during the warmer seasons, exhale malaria and other poisons sufficient to infect whole neighborhoods. To encroachments of civilization, and the attendant increase of population, are year after year making these poisons relatively more virulent, and yet, for the want of a general and practical remedy, the population annually sicken and a number of unnecessary deaths occur. The enforcement of a proper authority could remedy this evil in a few years, at the same time there would be an increase in the wealth of the agricultural districts which would repay the expense in a tenfold ratio. The larger the tract of land requiring to be drained, the greater the number of different townships situated in such an area, the more the necessity for some centralized State authority which shall adjust all differences of opinion of local authorities to the standard of the common good. It would, indeed, be impossible to meet the emergencies in any other way. There is a great deal of work to be done, it is true; but we must be prepared to make a beginning somewhere. The State authorities understood the merits of the general question of State jurisdiction in regard to the water supply of our city, and have acted accordingly. In no other way could we be assured that our drinking water would be free from the chances of ordinary contamination. A striking example of a neglect to look after a similar matter caused the melancholy epidemic at Eagley, and the possibility of its repetition in some other localities is causing the deepest anxiety among the sanitarians of Great Britain. But we must be prepared to go beyond a local jurisdiction beyond the care of a limited portion of the State for a given purpose, and extend a general jurisdiction to the entire commonwealth. Drinking water is liable to contamination in other parts of the State; the rivers which run through scores of counties must be kept in sanitary conditions, so that the sewage of one village does not mix with the drink of another.

The railroads, too, are not entirely free from evil effects upon the health of the people along the line. Many matters in connection with them deserve the attention of a board which shall have the power to enforce requirements, not only in a given locality, but throughout the entire route. There are many instances in which the building of a railroad has so altered the drainage of a district, that malarial diseases prevail, where before they had never been known. Although we have no very glaring examples in our own State, the history of the towns along the line of the Hudson River Railroad is sufficiently suggestive of the truth of this assertion. In many places between this city and Albany there are collections of stagnant water along the line of the track, which are covered during the whole season with a pestiferous scum, capable of supplying malaria to every passenger on the road. This is in the main due to the grading of the road, which in many places so directly interferes with the drainage as to create what would otherwise be rippling brooks into stagnant pools. The same complaint might be made of the other railroad lines

throughout the State. No local health board could deal with such an evil.

There are many other subjects to be taken into account, in connection with the beneficial working of a State board such as we propose. Not only is it the province of a health board to look after the purity of water, but to guard against any chances of its diminished supply. It is well known that the forests hold a very important relation to the latter condition, and that their destruction accounts in a measure for the droughts, the consequent exposure of brook and lake beds, and the general scarcity of water at the time of the year when it is most needed. The proper care of the forests has long ago been a matter of great concern with sanitarians in Europe, and has necessitated legislation upon the subject. Already, in this country, efforts are made in the same direction; and in this State a bill is pending for the creation of a Commission, whose duty it shall be to prevent the wholesale destruction of trees. If such a commission be created, it would obviate the necessity for the interference of any health board, or for the exercise of an authority which might legitimately devolve upon it.

Since it has become the fashion throughout different portions of the State to establish religious camp grounds, we have another argument in favor of a central State board. The local authorities seemingly have no power to enforce any of the necessary sanitary regulations upon these corporations; and the consequence will be that, ere long, many of these grounds will be transformed from health resorts into so many centres for the propagation of diseases. At present there is no other guarantee for the proper sanitary care of the camp people, than that which may be centred in the whims of an executive committee. In many instances, the salvation of the pilgrims has been secured by their short sojourn in these localities. By-and-by even this immunity will not obtain. The soil must become sooner or later saturated with sewage, the water become contaminated, and low forms of fever be propagated. But we need not multiply examples to prove the necessity for the existence of a State board having the necessary authority to act on all questions of similar import. Every one who has given the subject any attention at all can amplify the list, so that it shall comprise all the reforms which, under present circumstances, it is impossible to attempt.

PRESIDING OFFICERS FOR MEDICAL ASSOCIATIONS.

The Kentucky State Medical Society, at its recent annual meeting, adopted a resolution to the effect that its Committee on Nominations shall hereafter not consider themselves bound to present for the Presidency the name of a physician from the locality where the Society meets. This is a very sensible measure, and will in the future tend to remove much of the embarrassment under which such a Committee may labor, and tend to an impartial distribution of the honors, and the selection of truly representative men. If the same resolutions were adopted by other similar organizations, much dissatisfaction would be prevented.

PRELIMINARY EDUCATION.

In the last announcement (1876) of the Portland School for Medical Instruction, Portland, Me., we notice the following significant provision:

"No person will hereafter be admitted to the school, who does not satisfy the Board of Instructors that he possesses at least a good common school education. The fact of graduation from college, or from a respectable high school or academy, is taken as sufficient evidence of such acquirements; but in the absence of a diploma, or certificate to this effect, a written examination will be held."

The regulation is, we understand, giving general satisfaction to all interested in the welfare of the college; and a better class of students is secured. This is as it should be, and shows on the part of the school a determination to respect the growing professional sentiment.

SMALL-POX SPREAD BY DOGS.

A rural sanitary organization in England, has applied, through Dr. Mackintosh (*British Medical Journal*), for an order from the magistrates to have all dogs in the district of Bolsover chained until small-pox has disappeared in that locality.

Dr. Mackintosh considers, and very properly we think, that "the disease is spread from house to house more by domestic animals than by anything else." We believe that the more this subject is examined from this point of view, the more the views advanced will be considered correct. It is possible also that the spread of other contagious diseases, such, for instance, as scarlet fever, may be explained in this way when all other recognized reasons have failed.

THE AFFAIRS OF THE HEALTH OFFICE.

The investigation of the affairs of the Health Office by the Assembly Committee on Commerce, have tended to place the health officer, Dr. Vanderpoel, in a very disagreeable light. Attention has been more particularly directed to his private yacht, "Gertrude," the running expenses of which appear to have been paid by the State in lieu of public services rendered. The testimony given before the Committee does not, we are sorry to say, place the doctor above the suspicion of using public money for private purposes. The cost to the State of the "Gertrude," is said to have been over eleven thousand dollars, and yet the whole amount received for earnings of all the boats, the "Hopkins," the "Fenton," and the "Gertrude," during the year was but seven hundred and ninety dollars. We sincerely hope that this

is not true, and that Dr. Vanderpoel may have some good reason for the course he has taken, and effectually explain what to his friends, who have the utmost confidence in his honesty, seems past comprehension. A character such as the health officer has earned for himself as a gentleman of the highest integrity, is not to be easily overthrown, and we are still hopeful of vindication.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, March 22d, 1876.

FIBROMA OF VAGINA—REMOVAL BY ECRASEUR.

DR. C. K. BRIDDON, PRESIDENT, IN THE CHAIR.

DR. METCALF exhibited an egg-shaped tumor (¾in. × ½in.) which had been removed by the écraseur from the vagina of a patient aged fifty-two years. For four years she had suffered from "weakness" pain in the lower part of the abdomen and around the waist, occasionally accompanied with difficult micturition. The operation was performed in October, and the woman made a good recovery. The tumor was examined microscopically by Dr. Heitzmann, who declared it to be a simple fibroma.

DR. SELL had met with a similar case in an unmarried lady aged twenty-seven years.

OSTEOID CHONDROMA OF TIBIA—AMPUTATION OF THIGH.

DR. MASON next presented a specimen of morbid growth in the head of the tibia, removed by amputation of the thigh, February 22d, from a male patient sixty one years of age. The patient was seen, in in consultation with Dr. Van Geisen of Greenpoint, was strictly temperate, and had enjoyed excellent health until three years previous. At that time he received a blow upon the tibia, which produced very intense pain and laid him up for two or three days. He recovered from this, and had no further trouble until six months after, when he had a severe attack of pain in his knee, and another two or three days' confinement. After this he had similar attacks every two or three months. They were regarded as rheumatic in character, and were prescribed for accordingly. About two months ago an enlargement of the tibia was noticed, which was apparently due to a growth from the outer surface of the bone pushing the fibula outwards.

A few days before the operation, the patient, when Dr. Mason first saw him, was very much prostrated; the pain from which he suffered was so severe as to be only partially controlled by powerful anodynes. On examining the leg, which was partially flexed, the presence of a morbid growth was at once discovered. The surface was very sensitive to the touch, but, contrary to expectation, did not give any egg-shell crepitus. The diagnosis of osteo-sarcoma was made, amputation advised, and the section carried through the tumor, just above the condyles.

The tumor had been handed to Dr. Delafield, who made a verbal report:

The external surface of the tumor, which involved the head of the tibia, was composed of cartilage. The basement substance of cartilage was partly hyaline and partly fibrillated. The cells were of a somewhat irregular shape, as they were apt to be in new growth of cartilage. In the enlarged portion of the head of the tibia, there were scattered nodules of cartilage which varied in size from the point of a pin to that of a chestnut. Some of these nodules were quite near to each other seeming almost to fuse together. Other abnormal appearances in the enlargement were due to a growth of connective tissue, and of cells in the medullary spaces between the bone, which also contained a number of blood-vessels. The fat which should have existed in the medullary spaces was almost entirely absent. The development of new cartilage was not confined to the medullary spaces, but invaded the bone cells and the basement substance of the bone, itself. The bone cells were considerably enlarged, many of them containing two or more nuclei, and, becoming fused together, to form a cavity of some size filled with cells. When this occurred near the edge of the bone, a little cavity would be formed communicating with the medullary spaces. The cartilaginous growths originated from the periosteum, and also from the medulla of the head of the tibia—in other words, the growth was an example of osteoid chondroma.

MYXOMA OF AXILLA.

DR. BRIDDON presented a specimen of Myxoma of the Axilla with the following history, from Dr. C. B. Roof, House Surgeon:—

Benjamin Brennan, æt. 18, United States—Grocer—Admitted March 7th, 1876. About six months ago the patient first noticed a small lump situated midway between the left nipple and the coracoid process of the scapula, which has grown steadily ever since; he would have paroxysms of sharp stinging pain, which would last about fifteen minutes in the tumor, and then pass down the side and arm. Father and mother are both living, and he gives no history of any hereditary disease whatever.

The left axilla was entirely filled with a large mass about the size of the fœtal head; it reached to the lower border of the clavicle above, covering in the coracoid process, and bulged the floor below; it was immovable, and appeared to be fixed to the thoracic boundary of the space; there was no evidence of pressure on the plexus of vessels and nerves; its anterior surface was covered by the pectoral muscles, and it did not appear to have any attachment to the scapula; dilated veins meandered over its surface, and to the touch it presented the soft, elastic feeling characteristic of malignant disease.

Operation March 9th, 1876, in the presence of the Hospital Staff and a number of medical men. After complete anæsthesia, the arm was extended, and a long incision carried from the thoracic to humeral extremity, midway between the anterior and posterior folds of the axilla; the dissection was continued through the subcutaneous fat and fascia, until the surface of the tumor was exposed, when the knife was laid aside, and an attempt was made to enucleate the mass with the fingers. This was found, however, to be almost impracticable; the capsule did not form a complete investment, but everywhere at the circumference appeared to merge into the fascia immediately investing the walls of the chest; all the soft parts, forming the anterior wall of the space, were separated as high as the inferior border of the clavicle; below it was found necessary to divide a portion of the great pectoral muscle, and this was done at its point of origin from the ribs; thus the whole mass was exposed, and found to be firmly adherent to the thoracic wall. In attempting to separate these connections, the aponeurotic investment gave way, and it was found that the mass of soft cerebriform consistence, was continuous through

the intercostal spaces, with growth of the same character within the cavity of the chest itself. The pleural sac itself was not opened; the intrathoracic portion appeared to be situate between the pleura and the chest walls; the ribs were eroded and depressed over the area that had been occupied by the tumors; everything was cleared out of the axilla, and in doing this a large vein was opened and secured; the oozing from severed isthmuses that had been the bond of union between the axillary and thoracic portions of the growth was treated by the application of charpie and persulphate of iron, supported by compress and bandage.

The amount of blood lost during the operation was very great, and the exhaustion of the patient of a pronounced character.

March 10th. Patient has passed a quiet night, but this morning he complains of a sharp pain in the left side, for which he was given teaspoonful doses of United States solution of morphia at intervals of two hours, which seemed to allay the pain.

March 11th. Patient has been delirious all night, and pain in the side is increasing; respirations short and quick, with a dry, hacking cough; he was given a hypodermic injection of ten minims of Magendie's solution of morphine, after which he became quiet. Immediately after the hypodermic injection, patient's body became bathed in perspiration. This line of treatment was continued at intervals of four hours, until ten o'clock P.M., when he became unconscious, and about one A.M., March 12th, he expired.

Microscopic Examination by Dr. T. E. Satterthwaite, Pathologist to the Hospital.—The portions sent for examination were exceedingly soft and jelly-like—much like half-set jelly.

After immersion in Miller's fluid and alcohol, it became firmer, so that sections could be made from it. It was then seen that the tissue was made up of a large variety of corpuscles, some stellate, some spindle-shaped, some ovate, and others round, the corpuscles embedded for the most part in an amorphous substance, though in a few places there were fibres between the corpuscles. Vessels were quite common in the tumor, and blood-cells were extensively extravasated in most of the parts examined. Since the corpuscles had undergone mucous change.

Judging from the prevailing character of the tumor, it should be regarded as a myxoma; in a few places there were sarcomatous elements.

Dr. Gibney exhibited portions of the dorsal cord removed from the carious vertebral column of a boy eight and a half years of age, who died of catarrhal pneumonia. The spinal disease had its origin in a fall at the age of three years, and resulted in a sharp angular curve in the dorsal region. The point of interest in the case was, the entire absence of any evidences of pachymeningitis, the result of pressure on the cord. Far from this being the case, the canal, at its angle of bending, was rounded off, entirely guarding against any chances of pressure. A residual abscess, containing a cheesy mass, was discovered on the right side of the tenth dorsal vertebra.

No other members having specimens to present, the Society went into executive session.

Statue to the late Sir James Y. Simpson.—The statue which is to be erected in Princes Street Gardens, Edinburgh, to the memory of this distinguished physician, will probably be ready for transportation in June next.

Correspondence.

MEXICO AS A RESIDENCE FOR INVALIDS.

Letters from Prof. E. R. PEASLEE, M.D.

II.

City of Mexico, *March* 13, 1876.

Mr. Editor:—I now proceed to matters of more exclusive interest to our profession, and to those, invalids or otherwise, who contemplate making this city, or this country, a winter residence.

Situated 19¼° north latitude, Mexico is at an altitude above the sea level, as I find by reference to the railroad survey, of 7459.7 feet. The air is never cold, to one clad in a medium winter suit for New York, and is not uncomfortably warm, except on direct exposure to the sun. During the past three winter months, the indoor temperature in this hotel, (the Iturbide) was never below 58° of Fahrenheit, nor above 63°. During the hottest months—March and April—the average indoor temperature, as found at the American legation, is 68°. The nights are cool the year round, and frost is not very uncommon.

Rain falls here but seldom, except during the rainy season, which continues from June till October, excepting about two weeks in August. It then recurs daily at 3 to 4 P.M., and generally continues one or two hours, and sometimes into the night. During the past winter, however, there have been six showers, and another occurred since my arrival here. There has been no cloudy day, and only on four days has the wind been unpleasant. On six days only were rubbers required, and this merely to keep the soles dry. These data are given me by a very intelligent gentleman, who has spent the winter here.

Thus the weather is so regularly clear and fair, with the modifications just explained, that it is not a common topic of discussion or remark, as almost everywhere else; but the statement that it is never so is unfounded.

The rainy season is the most healthy part of the year. But there is at all times a peculiar dampness within doors, and which in the very sensitive is liable to produce a sensation of chilliness. There are two facts to account for it. (1) The present city of Mexico was built upon ground formerly covered by Lake Tezcuco, and into which it is drained. Thus the drainage is very defective, and the ground is saturated with moisture from the surface downwards. Indeed, soft mud is found less than two feet beneath the pavement. And, since cellars are here unknown, the dampness permeates every part of the house; and (2) is never removed, since fires are never used—with perhaps half a dozen exceptions in the whole city—either in sleeping-rooms or parlors. This dampness is, therefore, never overcome, except so far as it may be modified by the admission into the apartment of the sun's heat, and which of course, can occur only in case of those having a favorable exposure. The difference in a sanitary point of view between apartments having such an advantage, and those unvisited by the sun, is recognized in the fact now generally understood that the houses on one side of a particular street are very unhealthy, while those on the opposite side are quite healthy, *e.g.*, those on the north side of the Calle de Plateros are known to be healthy residences, while those on the south side seem to be almost pestilential.

It is against this dampness and chilliness that the stranger must be especially on his guard. And as he

is more liable to the latter on returning to his room after out-of-door exercise, he will find it judicious to sit in his apartment, especially if it be in the shade, with an additional covering, as a cape or a shawl. While walking the streets, it is better to keep the shady side; but if once on the other, to use an umbrella, and not cross when very warm into the shade. The direct rays of the sun must be avoided. Sunstroke is, however, here very uncommon.

Carelessness in these respects on the part of strangers is very likely to be followed by a fever of a typhoid type, which is not seldom fatal; and especial precautions should be taken when this fever is prevailing as an epidemic. One of the sons of Rev. Dr. Butler, the distinguished head of the Protestant Church in San Francisco street, died of this fever, and another son and daughter very narrowly escaped.

In consequence of the defective drainage and the dampness of this city, typhoid fever and pneumonia are annually epidemic; and these two diseases together, I am assured, produce more than half of its entire mortality. Its population is variously estimated from 210,000 to 300,000. I think 250,000 for the city proper, and 50,000 for the suburbs is a sufficiently liberal estimate. But at any rate, the epidemic of typhoid fever of the last season carried off 8,000 (some authoritiessay 10,000) persons; or at least 3,2 to 4 per cent. of the entire population. The deaths from pneumonia were probably not less numerous. Typhoid is epidemic in March, April, May and June, but sporadic cases occur throughout the year.

During the past winter also very many children were destroyed by an epidemic of "throat disease," and which I believe to have been unrecognized diphtheria. Neuralgic affections and paralysis are also quite common. Rheumatism occurs more frequently in foreigners.

Mexico, therefore, cannot be regarded in general as a healthy city; and until a better drainage is secured —an immensely expensive enterprise long ago commenced, and probably not for the next fifty years to be completed —it must become less so. But the main question, and which I next consider, is its merits as a resort for those suffering from chronic pulmonary affections in the Northern parts of our Union. Such patients are necessarily absent from home from about November 1st to the first of May, or later, and would be in this country during the three winter months, and March also, perhaps; taking the trip leisurely to this city and back to New York. They would thus avoid most of the time when the epidemic of typhoid occurs, though pneumonia especially prevails during the winter months.

Since the whole ascent of 7459 feet from Vera Cruz to Mexico is made by rail in fifteen hours, as has been seen, and the ascent to the highest point on the road, 8318.5 feet, is made in about ten hours, many travellers, though in health, experience a decided dyspnœa on reaching these altitudes, especially on making any considerable muscular exertion, on account of the rarefaction of the atmosphere; though no amount of effort produces much sensible perspiration. The consequences in cases of pulmonary emphysema, or asthma depending on cardiac affections, are, as might be expected, not favorable. Asthma depending on derangement of the stomach, however, is sometimes here cured. Chronic bronchitis also, is not likely to be relieved at this altitude, combined with the dampness I have mentioned. But all these are alleviated by a residence at a lower altitude, the point suitable for such cases being found at Vera Cruz, or between that city and the altitude of Cordova or Orizaba, *i.e.* 2700 to 4000 feet.

Phthisis is not indigenous in this city, and it is not seldom arrested in those who come here from the North. A member of the Mexican Congress assured me that the natives do not die of phthisis, and that the lives of phthisical patients from the North are usually much prolonged by a permanent residence here.

I have, however, satisfied myself that while all this is true, and while this city is a very delightful residence for Northerners in health, and who take the precautions to maintain it, it presents no special advantages to phthisical and bronchitic patients. I cannot recommend it, therefore, to such as a winter residence.

But there are other places of lower altitude in this country which I believe to be fully equal, and in some respects even superior to any of the famous resorts abroad I will mention, as on the railway from Vera Cruz, Cordova (altitude 2715.5 feet) and Orizaba (4030.7 feet); both presenting a tropical climate, and all its productions, and the most grand and picturesque scenery. Cordova has, however, sometimes been visited by yellow fever. Jalapa, also now accessible by another railroad from Vera Cruz, is doubtless equal to either of these places as a sanitarium for this class of patients; and as a residence is one of the most beautiful places on earth. Its great humidity may, however, render it unsuitable to some cases, and the sudden chill of the northers must also be guarded against in these places. But Cuernavaca, sixty miles south of this city, and not accessible by railroad, has an altitude of 5428 feet, and the same climate and productions as Orizaba; and is far more desirable. In addition to these places, Dr. F. Semeleder, of this city, formerly physician to the Emperor Maximilian, mentions Tetecala, not far from Cuernavaca. Atlixco, 23 miles from Puebla, is also recommended, as well as Monterey, though the latter is accessible only by a tedious journey by diligence.

But I must bring this communication to a close; and will only add that the expense for medical attendance in this city is as follows: To those abundantly able to pay, $2 per visit, if made daily; and $3 or $4 if made but seldom, as in chronic cases. Consultation visits are $10 to $20, according to circumstances. The charges, however, average considerably less than this, and in all the other places I have named is not over $1 per visit. Very little quinine is prescribed here, and in the epidemics I have named iron is very much used; but, with this exception and arsenic, the vegetable remedies are, I am told, generally preferred.

E. R. Peaslee.

PROFESSIONAL RESPONSIBILITY IN PRODUCING ABORTION.

To the Editor of the Medical Record:

Dear Sir: In the last number of your journal, there is a letter upon the subject of criminal abortion and abortifacient drugs, signed "C.," which suggests a few words in reply.

In answer to the question as to the "properties of aloes" we will quote from a few well-known authors.

Ringer says aloes acts mainly on the large intestine and rectum; by its action on the rectum it sympathetically affects the neighboring pelvic organs, as the uterus; and is useful in many cases of amenorrhœa and deficient menstruation.

Headland says, aloes appears to act on the lower part of the intestine, and is therefore objectionable in cases of pregnancy or of uterine disorder.

Scanzoni classes aloes with savin and ergot, as a

medicine capable of determining the blood towards the organs of the pelvis, while

Barker, in his work upon the *Puerperal Diseases*, says that he has for many years given aloes to pregnant women, with a tendency to hemorrhoidal affections in sufficient quantity to secure one easy, free daily evacuation of the rectum.

From these statements, we conclude that aloes may be given in some cases of amenorrhœa with advantage; and that although it acts upon the rectum, and the uterus, it has been found useful and safe to administer it in certain conditions arising during pregnancy. We believe the same is true of ergot, savin, and digitalis; hence we see no reason for considering any one of these medicines an abortifacient. They are, indeed, often of the greatest service in checking a tendency to abortion; but much discrimination should be exercised in the choice of cases for which they are applicable.

Let us now review the "circumstance" which you related to the attorney, beginning with the words "some few years ago." The case is briefly as follows: A married woman had not menstruated for "over three months," and her husband applied to you for medicine to "make her turns come regularly." Without becoming in the least degree familiar with her condition, in fact without seeing her, you prescribed a "compound, the basis of which was aloes." This is the form of practice we are constantly condemning in the unprincipled druggist—the medical impostor, and the advertising abortionist. In most cases, indeed, they are compelled to exercise more care than was shown by you in this case. For should disastrous results follow, they cannot take refuge in a learned diploma, nor call upon the medical profession to "help them out."

We do not pretend to know what your object was in prescribing this compound; but if, as we infer, you desired to restore the menstrual flow, you might with equal and even greater propriety, have made use of other means; as, for example, the injection of hot water into the vaginal canal—the stimulating foot-bath—local applications to the cervix uteri passage of sound into the uterine cavity, &c. for these are methods indicated in many cases of amenorrhœa, and we confess surprise that you did not resort to one or more of them. Probably, however you have tested your "compound" so frequently under similar circumstances, as to have complete confidence in its sufficiency. Sure enough, in eight or ten days you were summoned to see your patient—the courses which had been absent for three months and over had returned. Happy result! What an excellent compound! But your attention is called to something else, and you rupture the sac (a most laudable procedure, for it marks the beginning of careful practice). Then you tell your readers you "discovered a fœtus" at least three months old. The diagnosis was a good one, but made rather late. You should have discovered it ten days before, within the uterus.

Now we do not accuse you of criminal intent in this matter; we are not even prepared to assert that your "compound, the basis of which was aloes," produced the abortion. You cannot, however, be too severely blamed for administering this drug, at random, while in entire ignorance of the woman's condition. Such practice is an abuse of professional power, and if the medicine you gave was the cause of, or increased in any degree the tendency to, this abortion; or if by previous knowledge of her condition, you could have by advice or medicine preserved the life of the fœtus—then are you partly responsible for its death.

Ignorance does not excuse you; since it was here your special office as a physician to investigate and know; and whether "this fellow" (the husband) designedly or innocently misrepresented the facts, does not in the least alter your responsibility. If you were duped, so much the worse.

One word in conclusion: your reference to abortionists and their numerous followers throughout our country suggests a remark, by way of admonition to our profession. Let us remember, that the number of *criminal* abortions is insignificantly small, as compared with those produced by disease, and although we are familiar with many of these diseases, yet we have not made ourselves masters of them. Moreover, recent investigations plainly indicate that we have as yet learned to recognize only the very smallest percentage of actual abortions; that abortions chiefly occur at the first or second month, and pass unnoticed. In view of these facts, and their important practical bearing, what a great demand is made upon the physician for earnest and devout labor in this department of science.

Again, in our relations to families as guardians of health and life, are we doing what we can to prevent the accidents and dangers to which fœtal life is exposed?

Especially let us be on our guard lest, by careless medications, we be often made unwilling participants in the crime of infanticide.

Yours truly, H.

SALICYLIC ACID IN RHEUMATISM.

To the Editor of the Medical Record.

Sir:—Will you please give a small space in your journal to the following case:—

Mrs. Voorhis, aged 54, of a nervous and lymphatic temperament, weakly and emaciated, was for several years subject to general bronchitis and occasional attacks of articular rheumatism. On February 18th, she was taken ill with polyarthritis rheumatica, in the finger joints of both hands; 24 hours after, suddenly jumping from one articulation to another, invading in 48 hours all the joints of her body.

Treatment:—First of all, the caustic ammonia, highly recommended by Dr. Franz Heller, was faithfully tried, but failed.

Having read of the good results obtained by Dr. Stricker with the Salicylic Acid, lately introduced by Dr. Traube, and having failed with all other known remedies, on March 30th, I determined to give it a trial. Its result was gratifying to me; for the patient was relieved of her so long-endured, excruciating pain in a few hours. The quantity prescribed was two drachms, divided into sixteen powders, which were given in wafers, one every hour. After the fourth powder the pain commenced to subside up to the thirteenth, when, being completely freed from it, she fell into a refreshing sleep, of which she had been deprived for many days, and which she now enjoys for several hours. On awaking, the swelling and heat of each joint, and the contraction at the knees had gone, and she was able to walk. The action of the remedy was somewhat peculiar. From the fourth dose was observed a marked degree of coldness all over the body, and a warm sensation internally. After the sixth powder the periphery of the body became quite cold, and dripping with a profuse and acid perspiration, particularly from the head. At the thirteenth dose, just before going to sleep, the thermometer fell from 106°, which it was previous to the use of the acid, to 96°, remaining so for ten hours—six hours while asleep, and four after waking. On her awaking, she remarked that the tip of her nose and lower

extremities were painfully cold. The internal heat, though, according to the patient's statement, particularly at the region of the stomach, was simply unbearable; yet the tongue and breath were very cold. The pulse, from an average of 100 during the forty-one days of rheumatism, rose to 150, very thready and readily lost under a slight pressure at the wrist, and the respiration 30?; continuing so together for six hours. During the time, she was complaining of internal heat and the want of fresh air. She was very much excited, and was begging me in a very feeble voice not to leave her bedside, fearing she should die. In fact, in view of the above train of symptoms, and not being well acquainted with the action of the acid in similar cases, and at such quantity, I felt very much alarmed at her condition; but whiskey, generously used, aromatic spirit of ammonia, hot bricks round the body, and warm blankets, after several hours of dreadful anxiety, removed the unpleasant algid state, and things assumed a more favorable aspect. In addition to the above symptoms, after the fourth dose, tinnitus aurium commenced, with a total loss of hearing; the former lasting six hours after the discontinuation of the drug, and the latter twenty-four hours. Although the patient was without pain twelve hours after its disappearance, the acid was resumed for four days longer at seven grains every six hours. At each dose a decrease of temperature was observed, about 1½ degrees, and the return of pyrosis for a short time only. Had she been strong, very likely the symptoms above narrated might not have occurred.

I have used the acid in seven grain doses every four hours in the case of another woman, 36 years old, afflicted with chronic rheumatism and swelling of the ankle-joints, with a similar result, and reduction of swelling. My patients, so far, eleven days after the use of the acid, are free of pain, notwithstanding the atmospheric changes. From what has been said by Traube, Stricker, and other distinguished writers, and from my own experience of this one instance, I am fully convinced that salicylic acid cures inflammatory rheumatism, no matter how; and unless I should hereafter be disappointed in similar cases, I shall avail myself of its efficacy. While, however, the effect produced by both quinine and salicylic acid are in some respects identical; still, the distressing pyrosis and acceleration of the card ac organ, caused by the latter, would forbid my using it as a febrifuge.

Respectfully yours,

S. Cabo, M.D.

129 W. 33d St.

DR. MUNDE'S REPORT ON GYNÆCOLOGY.

To the Editor of The Medical Record.

My Dear Sir: Will you permit me to correct an error in the account contained in your issue of the 15th inst., of my annual Report on Gynæcology, read before the Medical Journal Association on the 7th inst.?

Speaking of the Physiology of Ovulation and Menstruation, your reporter says: "Dr. Mundé, however, did not accept this doctrine (the independence of ovulation and menstruation), and placed himself with those who believed that menstruation is an accompaniment of ovulation, according to the old theory."

By referring to my Report, published in the April number of the *Journal of Obstetrics*, it will be seen that I repeatedly take exactly the opposite ground, so far as is admissible in a paper of that nature. For instance, after describing the old theory, I say, "But, unfortunately, in the course of years, a number of incontrovertible facts have appeared, which cannot be made to correspond with it, and which prevent the indissoluble connection of menstruation and ovulation from being received as a law," etc. Again, "In view of these serious and insurmountable objections to this old theory," etc.

Now, while it makes but very little difference what opinions any man entertains on a subject on which he has no personal experience, and which he has not himself investigated; still, in this instance, I should prefer not to be placed on record as holding a view, in my opinion, directly contrary to the evidence, which I believe to be decidedly in favor of the new theory of the independence of ovulation and menstruation, after those functions have once become fairly established.

Yours truly,

Paul F. Mundé, M.D.

20 West 45th St., *April 17th*, 1876.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department of the United States Army, from April 16th to April 22d, 1876.

Baily, E. J. Surgeon, and Medical Director—Granted leave of absence for 30 days. S. O. 38, Department of the Columbia, April 3, 1876; and leave extended one month; S. O. 45, Military Division of the Pacific, April 12, 1876.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending April 22d, 1876. Walter De F. Day,

Sanitary Superintendent.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro Spinal Meningitis.	Measles.	Diphtheria.	Small pox.
April 15th.....	0	8	103	5	72	75	29
April 22d.....	0	12	80	4	51	76	16

Sir William Wilde, of Dublin, is reported to be seriously ill.

Dr. John Brown, of Edinburgh, the distinguished author of "Rab and his Friends," "Spare Hours," and other works, has had conferred upon him a civil list pension of one hundred pounds per annum, in recognition of his literary eminence. This announcement will gratify the thousands of readers, in and out of his profession, who have enjoyed his classical productions.

Kentucky State Medical Society.—The annual meeting for 1876 was held at Hopkinsville, Ky., April 4. The following officers were elected for the ensuing year: Dr. R. W. Gaines, of Hopkinsville, President; Drs. C. H. Todd, of Owensboro, and L. S. McMurtry, of Darille, Vice Presidents. Dr. J. H. Letcher, of Henderson, Secretary; and Dr. A. D. Price, of Harrodsburg, Secretary. The next meeting will be held at Louisville, on the first Tuesday of

April, 1877. A full report of the proceedings will be found in the *Louisville Medical News* for April 15.

Street Pavements.—Gen. Q. A. Gillmore, in a work on the construction of roads, street pavements, etc., is strongly inclined to favor pavements of natural asphalt, as used in the streets of Paris, while he decidedly condemns the worthless inventions, erroneously called asphalt pavements, compounded with sand, gravel, or lime, and without any suitable cementing medium. This will, in his opinion, combine the two elements of greatest practical importance, durability and absence of noise from travel.

Dr. Samuel B. Ward, of this city, will remove to Albany in May. His numerous medical friends gave him a complimentary dinner at Delmonico's on the 25th instant.

The Harvey Statue.—Only £800 of the £3,000 required have been thus far obtained for the proposed statue at Folkestone.

English Army Medical School.—There is a report current in Great Britain, that the Army Medical School at Netley is to be abolished.

Beau-Ideal of a Consultant.—The *Medical Times and Gazette* (London), says: "Our beau-ideal of a consultant is one who, after a university or other liberal education, has worked hard when a student, has taken a good degree, and then settled down into private general practice; after some years of which, having meanwhile kept himself thoroughly *au courant* with the professional discoveries and improvements of the time, he abandons that branch and devotes himself to the cultivation of a consulting practice."

Dawson's *vs.* Piffard's Battery.—The typographical errors in the item of explanation with the above heading in the last number are such that we are compelled to make one more attempt to set matters right. By so doing we hope to avoid any lengthened discussion of the relative merits of the batteries by the gentlemen who are naturally the most interested. Since the appearance of the last number we have had the opportunity of measuring Dr. Dawson's plates, and obtaining from him certain explanations which enable us to present all the facts in the case. But first, in regard to the typographical errors referred to. We intended to state that Dr. Piffard's plates measured $5 \times 4\frac{1}{2}$ inches, and not "$5\frac{1}{4}$+ inches" as printed. Dr. Dawson, in his letter, was made to state the size of Piffard's plates as $6\frac{1}{2} \times 4\frac{1}{2}$, instead of $6 \times 4\frac{1}{2}$, a measurement which he says was based on Piffard's statement the evening of the meeting. Dr. D.'s statement that his platinum measured $5\frac{1}{4} \times 4\frac{1}{2}$ is a misprint (viz.: p. 260). Owing to an unfortunate ingenuity of the printer the quotation from Dr. D.'s letter, in our explanation, which should have been $6\frac{1}{2} \times 4\frac{1}{2}$ (erroneous as it was), was made still more so by printing it $6\frac{1}{2} \times 5\frac{1}{4}$.

As the result of a careful and personal examination into the merits of the questions in dispute, we now make the following, and we trust, final statement: Dr. Dawson's plates measure $5 \times 4\frac{1}{2}$ inches, and Dr. Piffard's plates measure $5\frac{1}{2} \times 4$ inches. Dr. Piffard used Dr. Dawson's cells, which were of course of same size as those used by Dr. D. Dr. P. used two more negative and positive plates than in Dr. D.'s battery, but Dr. D.'s lead and two pumps displace about as much fluid as Dr. P.'s extra zinc and platinum, and practically speaking the fluid used by each is the same. As we have said before, in regard to the merits of their batteries, we suspend judgment until after the report of the committee from the Journal Association.

How to Cure "a Cold in the Head."—Dr. David Ferrier, Assistant Physician King's College Hospital (London), recommends the use of a snuff composed as follows: Hydrochlorate of morphine, two grains; acacia powder, two drachms; trisnitrate of bismuth, six drachms. Of this powder, one-quarter to one-half may be taken as snuff in the course of twenty-four hours. The inhalations ought to be commenced as soon as the symptoms of coryza begin to show themselves, and should be used frequently at first, so as to keep the interior of the nostrils constantly well coated. Bismuth alone answers a very good purpose; but the acacia is added to give greater bulk to the powder, and to make it sufficiently light to be easily snuffed. The morphia is added in cases where it is advisable to strengthen the sedative effect. Dr. Ferrier speaks of it almost as a specific, and as being capable of aborting the "cold" in a few hours. Our friend Dr. Prout, of Brooklyn, must now look to his laurels.

Prof. Huxley was recently surprised by receiving a check for one thousand pounds from a Mr. Thomasson, of Manchester, in the name of his lately deceased father, who was a great admirer of the Professor, and highly appreciated his achievements in the furtherance of the knowledge of the science of life.

Surgical Anatomy of the Tibio-Tarsal Articulation.—Dr. John A. Wyeth, of this city, has republished, in pamphlet form, his Wood Prize Essay, from the last number of Hays' Journal.

The Medical Department of the University of Michigan is striving to extend its regular course of instruction to three years. There is every probability that in the end its plan may be successful.

Dr. Dewitt C. Peters, late Surgeon U. S. Army, died in Brooklyn, N. Y., of consumption, April 22, aged 47 years.

The Spread of the Plague.—From March 28th, to April 1st, one hundred and forty-five new cases of the plague have occurred at Bagdad, and seventy-five deaths. The disease has spread to Hillak, a town of Asiatic Turkey, sixty miles south of Bagdad, where there have been sixty-six new cases and forty-two deaths, and has also crossed to the left bank of the Tigris. Dr. Millingen, of the Turkish Sanitary Service, has been sent from Syria to the seat of the epidemic in Mesopotamia, in company with two other physicians of the service. At Bagdad a permanent Sanitary Commission has been instituted, one of the members of which is the physician of the English Consulate-General.

Statistics of Ireland.—During the quarter ending September 30th, there were registered in Ireland 5,131 marriages. During the quarter ending Dec. 31st, there were 31,960 births, equal to an annual rate of 24.1 per thousand, and 22,990 deaths, representing an annual mortality of 17.3 per thousand.

London Medical Charities.—London rejoices in the maintenance of eighty-five medical charities.

Weekly Bulletin of the Meetings of Medical Societies.

Monday, May 1.—Pathological Society of Brooklyn.

Tuesday, May 2.—N. Y. Obstetrical Society, N. Y. Dermatological Society.

Thursday, May 4.—N. Y. Academy of Medicine.

Friday, May 5.—N. Y. Medical Journal Association.

Original Communications.

LEUCOCYTHEMIA.

BEING A PAPER READ BEFORE THE MEDICAL SOCIETY OF THE COUNTY OF NEW YORK, MARCH, 27, 1876.

By EDWARD G. JANEWAY, M.D.,

PHYSICIAN TO BELLEVUE HOSPITAL, N. Y.

PART II.

PALLOR is usually a marked symptom, though there are differences in its degree, as might readily be imagined. The pallor is due more to the diminution of the red globules than to the increase of the white. In one of my patients the pallor was not very marked for a considerable period, yet the proportion of white globules to red was large. In another, B. F., the pallor when I first saw her was much more marked than it is to-day, for the reason that she had recently had a copious hemorrhage, from which she is at present not suffering.

In the third patient there is profound pallor, yet this is the case in which the red globules are markedly diminished. I had the opportunity of contrasting this patient's blood with that of a boy suffering in all probability from pernicious anæmia. The number of red globules in the boy's case was nearly as diminished as in the man, and the pallor was nearly as great; yet the boy had no more than the normal number of white corpuscles. The pallor is perhaps more liable to be overlooked in those who are engaged in out-door occupations, where a certain amount of browning of the skin of the face deceives the observer. An examination of the lips and conjunctiva in such cases will show that a certain amount of pallor exists. I have not found it specially mentioned in a large number of the histories of leucocythæmic patients examined; yet, as I attribute this to neglect and not to the absence of this evidence, it is as well not to mention the proportion.

Pain in the left side was present, and usually as the initial symptom, in 34 cases. I have already spoken sufficiently about this symptom in earlier remarks. It may have been present in a few other cases and not have been recorded.

Weakness of a certain amount is probably present in all cases, and, as already stated, may be one of the first symptoms of which the patient complains. It may compel the patient to give up work, confine him to his bed, or only be of sufficient severity to shorten somewhat his capabilities for exertion.

As you have already heard, one of my patients was able to drive until recently.

Another is at present engaged in vending fruit on a street corner. The third is confined to his bed, and for three months at least has been unable to work.

This weakness will of course be increased by the occurrence of fever, hemorrhages, discharges; and when these cease, a certain amount of strength may be regained. As the fatal termination approaches, the debility becomes marked.

Dyspnœa of a certain amount existed in a fair proportion of cases.

This dyspnœa may be dependent in part upon some complication, as hydrothorax, bronchitis, pleurisy, the pressure of enlarged glands upon the trachea or bronchi; but it will also be present in those cases where none of these lesions exist; or, when they are present, be too great to be explained by their existence. It is not infrequently the case that the dyspnœa is much more marked subjectively than objectively, *i.e.* that the patient complains of a greater distress than he apparently suffers.

It is to be referred to the condition of the blood, which, being deficient in red globules, cannot convey the proper amount of oxygen to the tissues. The enlargement of the spleen, and also of the liver, when existing, filling as they may the greater part of the abdominal cavity, by preventing the proper descent of the diaphragm, may occasion a part of the difficulty. It is more marked upon exertion than when the patient is quiet, and is often more a desire for breathing, as one of my patients expressed it, than absolute distress.

Dropsical effusions are of quite frequent occurrence. In the slighter grade, this simply produces a little puffiness of the skin about the feet or malleoli. More excessive, it occasions marked swelling of the lower extremities. In the cases I examined, it was mentioned in nearly one-half of the number; ascites existed in one-fourth, and was of sufficient amount to call for paracentesis in two cases. The dropsical effusion may also take place in the pleural cavity or in the air-cells, and in these situations we will find that it occasionally produced death.

Diarrhœa.—This is another frequent event in the course of the disease; and we will find that occasionally, from its severity, it has brought about a fatal termination. I find it mentioned in nearly one-third of the cases, and in about one-fifth as of some severity, and repeated.

Hemorrhages.—The most frequent source of hemorrhage is the nasal mucous membrane. In one of my cases, for a time, this was an almost daily occurrence. In another it has occurred, but has been only slight in amount. It existed in the cases examined in one-fourth of the number. In some of these it was very severe, repeated, and requiring plugging of the anterior and posterior nares. Less frequent sources were, the mucous membrane of the stomach (3), the bowels (3), the gums (2), the lungs (2), from a fistula (1), subcutaneous in the axilla (1). The origin of this last is not given.

In a few cases ecchymotic spots were present on the skin. In the case stated as hemorrhage beneath the skin in the axilla, Vidal on two occasions punctured a tumor which had formed in this site, giving exit to 300 grammes at first, and to 200 grammes on the second occasion; then he made a free incision, removing 1,200 grammes, nearly three pints.

Loss of appetite is recorded in only a small number of the cases; the probability that it existed at times in other cases is great. Vomiting occurred in ten cases.

Profuse perspirations were noticed in fifteen cases. These, as in other diseases distinguished by debility, were both distressing and debilitating.

Distress from cough is noticed in sixteen cases. In some it was dependent upon bronchitis occurring as a complication; in others upon a phthisical affection of the lung; and again, probably owing to the irritation of enlarged glands producing pressure, and a consecutive bronchial catarrh.

Fever.—This is apt to happen towards the close of the cases, and may occur during the course of the disease. In a few cases it has attended its outbreak. In the third of the patients which I have observed, the temperature has been higher than natural since he came under observation.

As in other diseases with febrile movement, an ex-

acerbation is apt to occur at night. Fever was noted as taking place in seventeen cases.

Headache, due in all probability to the insufficient nutrition of nerve tissue, was observed often enough to give it a place amongst the occasional effects of the disease.

Emaciation has been noted in eighteen cases. Considering the previous symptoms, more or less wasting would seem to be a consequence that might be anticipated with greater frequency.

Difficulty of swallowing, owing to pressure of enlarged glands in the neck and thorax, was present in four cases.

Salivation occurred once. *Stomatitis* occurred once. *Palpitation*, fainting fits, vertigo, jaundice (3), were present occasionally.

Abscesses, or *boils*, were noticed three times. Frequent micturition was a marked circumstance in my patient No. 1. It was especially troublesome when he was jolted, as in riding, and I attributed it to the pressure of the large spleen on the bladder.

An anæmic murmur is present in some, thought not in all cases. It occurred in only one of the three which I examined, and it is noted in some of the histories, and not spoken of in others. A variety of retinitis accompanies this disease, and is hence called leucocythæmia or leukæmia. The urine in cases has varied, and has been more or less diminished toward the last. Uric acid has been supposed to be increased by some; not in my case, and not constantly enough to make it of value. Hypoxanthin has been found pretty constantly in the splenic variety; not, however, in the lymphatic. The existence of lactic, formic, and oxalic acids are differently given.

In the case of Patrick G., the urine had a low specific gravity, a diminished quantity, but no abnormal ingredients could be detected in it. It seems as if, owing to the impoverished state of the blood, marked diminution of tissue-change was one factor. (Examined chemically by C. Doremus.) Dr. Gordon examined the urine of patient No. 1, but could find nothing marked about it.

The most prominent feature of the disease, besides the change of the blood, is the condition of the spleen and of the lymphatic glands; and these factors together make the diagnosis in any case easy. The size attained by the spleen and the lymphatic glands will be given under the head of pathological anatomy. These parts usually slowly and gradually increase in size; sometimes, however, more rapidly. They may enlarge together or separately. The mixed variety is the most common; then the splenic, and then the glandular. How frequently the marrow is involved is, as yet, uncertain. It was not thought of until 1869.

In those cases where no sufficient enlargement of the spleen or glands can be found, the marrow should be examined.

Cause of death and mode of dying.—The causes which I could make out as producing the death were as follows:

Asthenia in 34 cases; in 21 gradually produced; in 3 owing to previous profuse diarrhœa; 1 to tuberculosis; 1 due to previous abscess and lymphangitis; 1 due to recent pleurisy, œdema of lungs being also present; 1 to pneumonia; 1 to phthisis pulmonalis; 1 to hemorrhagia from a follicular ulcer of stomach; 1 to vomiting, diarrhœa, and fever; 1 to vomiting of blood two days before death.

Asphyxia in 7 cases;—1 due to pneumonia, hydrothorax, bronchitis; 1 to œdema of the lungs; 1 to œdema and pleuritic effusion; 1 to pneumonia, œdema, and congestion; 1 to pleuritic effusion; 2 to pressure of glands.

Asphyxia and asthenia in 2 cases;—1 to ascites, hydrothorax, œdema of lungs; 1 to hydrothorax and œdema of lungs.

Apoplexy in 5 cases;—1 meningeal; 1 cerebellar and of fourth ventricle; 1 in the ventricles of the brains and outside of the dura of spinal cord; 2 several apoplexies in the brain, and in one also involving cerebellum.

Syncope in 2 cases:—Pyæmia following amputation of leg produced death in 1 case; and hemorrhage from splenotomy in two cases.

The duration of the disease it is difficult to determine. The exact origin being in many cases very indefinite, it is almost impossible to calculate even approximately in some cases the length of the disease.

I have attempted, however, to do so, and arrived at the following results in such cases as I had the means of estimating, and which had arrived at a fatal termination—though it is very possible that I have not marked the whole prodromal stage.

It seems probable that five died within 6 months after development; ten within 6 to 12 months; sixteen from 1 to 2 years; eleven from 2 to 3 years; four from 3 to 4 years; five from 4 to 5 years; one from 5 to 6 years. Mosler mentions two cases of children of eight and ten weeks. Of those which died in this city, three were under one year of age. Some attempt to divide the disease into three stages.

1. A prodromal. 2, a developed; and 3, a stage of distribution of the disease upon other organs and of pronounced cachexia.

Mosler divides it into two stages.

1. A premonitory stage, during which the disease is forming, and the blood and the affected organ are becoming involved in the leukæmic process.

2. A stage of distribution of the leukæmic process upon other organs, and of pronounced cachexia.

He divides the duration, in considering the subject, and does not attempt to give the total duration in consequence of the doubt attending the origin.

CAUSATION.

The ages of the patients whose histories I examined were as follows:

The youngest was 5 years, the oldest 70 years of age; two were under 5; two between 5–10; four between 10–15; three between 15–20; eight between 20–25; eight between 25–30; fourteen between 30–35; seven between 35–40; six between 40–45; six between 45–50; six between 50–55; two between 55–60; three between 60–70.

As regards sex fifty were males and twenty-nine females. The proportion is very nearly three-eighths females, five-eighths males.

Four males were between 40–45; two females between 40–45; four males between 45–50; two females between 45–50; two males between 50–55; four females between 50–55.

An examination of the records of death, shows that in New York the disease occurs to a limited extent.

No. of cases of death from leucocythæmia:

1867, none; 1868, none; 1869, three—two males, one female; 1870, two males; 1871, three males; 1872, seven—five males, two females; 1873, seven—four females, three males; 1874, seven—four males, three females; 1875, eight—five males, three females. Total, 37—twenty-four males, thirteen females.

Upon what ground the diagnosis was made in these cases I am unable to state.

AGES IN THESE CASES.

Years.	Males.	Females.	Years.	Males.	Females.
1	2	1	45–50	2	2
5–10	4		50–55	3	1
15–20	2	1	55–60	2	
20–25	3		60–65	1	
25–30		2	65–70		1
30–35		2			
35–40	2	1	Total,	24	13
40–45	3	2			

The youngest age at which the disease has been noticed, is mentioned by Mosler as six weeks.

The following diseases preceded the occurrence of leucocythæmia, as far as I find them of sufficient importance to record:

Abscess: Glandular of the neck, four years before; measles at outbreak; variety, splenic and glandular.

Arthritis with anchylosis: Myelogenic type; duration of fistula 16 years.

Boils: Three years before, in a case of splenic type.

Cancer ulcerating: One case of glandular variety.

Eczema of legs: One case of glandular variety.

Exposure as sailor: One splenic.

Fracture of a rib, left side: One splenic, occurred 2½ years before.

Hemorrhage: One splenic and glandular—uterine, at child-birth, also a wet dwelling; one splenic from miscarriage; one splenic epistaxis for years.

Hygiene bad: One splenic.

Lactation prolonged: One splenic and glandular; she nursed a child five years, and until two years before disease.

Malarial fever: One splenic and glandular one year before; one splenic two years before; one splenic with phthisis eight years before; one twenty years, at times; one three years before, and twenty-seven years before; one seventeen years before.

Pneumonia: one splenic three years before.

Rheumatism: Several attacks at different ages; fever of some kind two years before.

Scarlet Fever: One splenic, a few glands involved; one three years before.

Syphilis: Splenic and glandular, occurred *at outbreak* of disease; one inherited.

Typhoid Fever: One splenic disease, commenced during convalescence; one eleven years before splenic.

Painters: Three cases, none of whom had lead colic, or evidences of poisoning by lead.

Mosler ascribes one case to strong mental excitement.

In many of the cases there is nothing to which the disease can be fairly attributed, and even in some of the cases which I have presented there would naturally arise a doubt as to the connection between the disease and its predecessor. The *post hoc ergo propter hoc* method of reasoning about the causation of disease is always dangerous, and it seems to me that Mosler falls into this error especially when he ascribes it to mental excitement in one case and to syphilis in another. It is well to record these cases, and perhaps at some time they may be of value in elucidating the origin of disease; at present it is premature to consider them as causes. Mosler draws attention to the fact that his was the first recorded case of origin of leucocythæmia with syphilis. Syphilis is a very frequent complaint; and the question naturally arises, why did it in this particular case produce leucocythæmia rather than in others? This same question comes back with equal force with reference to these other assumed causes.

It is of interest that three of these should have been painters.

Mosler alludes to a case of sudden origin from injury to the side from falling off a horse; I do not think that in this case there is a certainty that the disease had not already commenced; though I admit that it was probably accelerated by this accident. He alludes to the probability that injury to bones stands in causative relationship to the myelogenic form.

The disease is mostly present in the poorer classes of the community. Ordenstein referred one case to inherited syphilis, and claimed to have produced a cure by means of liq. Van Swieten.

Pathological Anatomy.—The condition of the spleen is one of the most important factors in this disease. It is found enlarged except in cases of pure glandular or marrow type. In a number of the cases which I examined the weight was given (34). It varied from 10 oz. in a child to 14 lbs. in an adult.

Spleen weight in these cases.—Under one pound, one 10 oz. child; from one to two pounds, 9; two to three, 5; three to four, 7; four to five, 7; five to six, 3; six to seven, 1; seven to eight, 3; eight to nine, 0; nine to ten, 1; ten to eleven, 2; fourteen lbs. 1.

It is to be supposed that the size varies with the weight. But it does not do so in that exact proportion which might have been anticipated. This would imply a difference in the specific gravity. I will mention a few of these exceptions. Perhaps the size was not accurately taken. 3¾ lbs.=11 × 6 × 3½; 3 lbs. 13 oz. =10 × 6¼ × 3½; 3½ lbs.=9½ × 6½ × 4; 5 lbs. 6 oz.=12 × 7½ × 4½; 5½ lbs. =11½ × 5½ × 4; 1½ lbs.=8 × 4 × 1½=48; 1½ lbs.=8 × 4 × 2 =64; 2 lbs.=9 × 6 × 3=162; 2 lbs. 15 oz.=8½ × 5½ × 2½ =116¾.

The size of the largest mentioned was 14 inches long, 10½ broad, and 4 inches thick. The examination in these cases also showed that in enlarging it always did so most in length, then in breadth, and least in thickness. The greatest thickness was 4½ inches. The capsule was thickened in a number of cases, either granular or in patches. The consistence of the spleen was usually increased so that it was sometimes spoken of as creaking under knife, of board-like resistance, carnified, or dense and firm. In others again it was stated to be simply hyperplastic, and in a small number the consistence was diminished, and it was easily broken down under the finger, or mushy. Its color is variously described as of a brownish red, bluish red, clear red, dirty black, pale grayish red, etc. In this in a number of cases the malpighian bodies are described as appearing either somewhat enlarged or as branched follicles. In others, the texture is spoken of as uniform—or again, a number had either what might be considered as infarctions or points of inflammation. Again, in a few the surface was coated by a recent fibrinous exudation. The splenic vein, though only spoken of in some as enlarged, was probably so in all. The disease in the spleen consists of an hyperplasia of gland elements, and in some of increase of framework also.

The liver was the seat of one or two processes, either a simple hyperplasia, or else of leukæmic new formations. The enlargement did not exist in all cases, notwithstanding the marked enlargement of the spleen. It was also enlarged in some cases in which the spleen was of nominal size.

The increase in weight varied from a slight amount, as 5 lbs., 6 lbs., 7 lbs., 8 lbs., and in one case three or four times, and another, the largest, 16 lbs. (7.48 kilogrammes). Mosler gives 14 lbs. as the largest weight attained by the liver. The increased weight is due to hyperplasia. In one case cirrhosis is stated to have been present, but this was to be looked on as an inter-

current affection. In 13 of the histories of cases which I have looked over, leukæmic knots were stated to have been present.

The enlargement of the lymphatic glands takes the upper hand in other cases, as in the second which Virchow described. This enlargement may involve all the glands, or be more limited in its distribution. It may be associated with the splenic form, or be independent of it. Besides, the lymphatic glands, the other organs, as the thymus, the thyroid, the solitary glands and Peyer's patches, the tonsils, and the lymphatic gland structures at the root of tongue, may become enlarged.

The lymphatic ganglia may acquire the size of a goose-egg; many are recorded of pigeon's-egg size. These glands, besides being enlarged, are in some cases described as being semi-fluctuating in consistence; others have a little firmer feel; on section, they have appeared of pale white color, with perhaps a tinge of red; others of pale reddish-gray color.

Friedrich records a case in which lymphoid new formation took place, not only in the spleen and lymphatic glands, but also in the mucous membrane of the stomach, of the small intestines, and of the large. He described them as looking like the medullary, infiltration of typhoid fever before ulceration.

The marrow of the bones may become affected; and some look upon this affection as the primary site of this disease (*Neumann*). Waldeyer describes a very good case of this variety.

The marrow, instead of being red, as in the short bones, etc., may become yellow and almost pus-like in its appearance, as in Neumann's; or, as in Waldeyer's, be more of a hyperplastic nature. Waldeyer, in his case, was disposed to place the leukæmia to the account of the bone marrow rather than to the spleen, whose enlargement was principally of an acute nature.

The lungs, the pleura, and the kidneys have also, at times, been the seat of secondary new formation of lymphatic structures; in the latter, rather as an infiltration of lymphoid cells.

The condition of the blood was that which attracted the most attention at first, and also led to the discovery of the disease.

In marked examples of the complaint it has been more or less white, and in the heart-cavities it has sometimes appeared like pus; so that in one case, on the opening of the heart, a bystander supposed an abscess to be present. The clots, too, have a more mushy, white character than usual, and in the red there is a tinge of white.

In speaking of the causes of death, I have sufficiently alluded to other pathological states complicating the disease. I might, however, add that Bright's disease may occur.

The treatment of leucocythæmia has been in the majority of the cases without permanent benefit.

Those medicines which have been claimed as successful are particularly quinia in large doses (Mosler), phosphorus (Broadbent and Wilson Fox), liquor Van Swieten (Ordenstein, case of inherited syphilis).

Mosler records, in the article on Leukæmia in Ziemssen, a case of which he gives the details, treated by quinia.

He gave a ten-year old boy 1½ drachms in five days; 15 grs. in the first two days, then 20 grs. in the next three days; then omitted it for two days; then for the next seven days he gave him 10 grains a day, and then for eleven days 6 grains a day.

Blood showed white, red globules, 1.20 at first; later, complete recovery dating from the use of quinia. The type in this case was splenic, and he states that the enlargement of the spleen also disappeared and has not returned.

Broadbent records a case which had an increase in the number of white blood-globules, though not the number expected, considering the extreme anæmia, together with a marked enlargement of the spleen, (reaching to the umbilicus), which yielded to the use of phosphorus. He gave a phosphorus capsule, at first twice, and then three times a day.

The spleen became so much smaller that it was almost under the border of the ribs. The liver also having been enlarged, became smaller, and the color improved. He does not know the final result, as the boy after a while failed to attend. He took phosphorus nearly seven weeks, and in this time the improvement occurred.—*Practitioner*, January, 1873.

Wilson Fox records a case of cure also; he used at first $\frac{1}{100}$, and then $\frac{1}{50}$ of a grain of phosphorus.

Landois, in his work on transfusion of blood, published in 1875, was only able to gather the results obtained in four cases.

Of these four cases the following are the statements:

Blasius: 1861, *splenic*; death.

Mosler: Splenic variety; temporary bettering, later relapse, then death; amount used 6 oz. of defibrinated blood.

Huter: splenic; 225 grammes defibrinated; after five weeks repeated; temporary improvement; later, death.

Heyfelder, Roussel: 260 grammes direct; permanent success.

I have already stated that Ordenstein has claimed a cure in one case, by the use of liquor Van Swieten, the case being one with inherited syphilis as the cause.

Splenotomy has been undertaken in two cases, once each by Bryant and Köberlé, the result being death in both the cases.

In addition to these methods which I have recorded, because success has been claimed from them, iron, iodine, or iodide of iron are usually recommended. I had been told that Dr. Da Costa had placed on record a case cured by the use of hypodermic injections of ergot, but I was unable to find the journal in which such statements were made.

The prospect of treatment is not very encouraging; but in view of these recent cases of recovery under several different plans of medication, it seems more amenable than had for a long time been supposed.

I should add that since this article was placed in print the case No. 2, B. F., has presented herself for examination; her spleen has increased in size, both in length and breadth, and the proportionate number of white blood-globules has rather, if anything, increased. Her general health has, if anything, improved; her color is better, probably owing to the exposure, and probably to an increase in the absolute number of the red globules.

Case No. 3, P. G., has died. He contracted an asthenic pneumonia of the left lower lobe, which proved fatal.

I regret that an autopsy could not be obtained.

Note.—I have omitted to mention the theories regarding the method of development of the disease, preferring to do so at a future time.

British Medical Association.—For some unexplained reason, the profession at Brighton, Eng., are not much in favor of the coming meeting of the British Medical Association in that place. The recent death of the President elect, who was a representative from that city, may be seized upon as a pretext for changing the place of meeting.

DUMB-BELL PESSARIES, AND KNEE- AND BREAST POSITION.

By JAMES D. TRASK, M.D.,

ASTORIA, N. Y.

In the January No. of the *New York Medical Journal* will be found a description by Dr. R. A. Page, of Washington, D. C., of a pessary constructed of cotton batting. His description of the mode of making the instrument is as follows: —"For an instrument of the ordinary size required, take a portion of hard rubber rod, either hollow or solid, the thickness of a lead pencil and about one inch and a half long. This may be bent in any desired curve by running it through the flames of an alcohol lamp and moulding with the fingers. The rod thus prepared is laid upon a piece of cotton-batting, about ten inches long by eight wide; the long edge must be folded over about an inch and a half on each side. The rod is then placed at the short edge of the cotton, and firmly rolled the whole length of the piece, after which it is wrapped in the centre tightly with strong sewing silk, for a space of about an inch and a half, leaving a soft, compact, and elastic ball at each end. Over the wrapping I sew a piece of lint very smoothly, with the nap outside, and the pessary is complete." The cotton batting should be "about one inch in thickness."

At the time that the description of this instrument fell under my eye, I had under my care a lady who has for several years suffered from aggravated anteversion. The vagina is relaxed, and there has been extreme tenderness of the uterus. Both these have seemed to depend upon congestion following the retarded flow of blood incident to the displacement. A faithful and persevering use of appropriate means had failed entirely to relieve the patient. These included the trial of various forms of pessary usually employed for anteversion, including Dr. Thomas' modification of Dr. Cutter's pessary, and his own well-known instrument for anteversion.

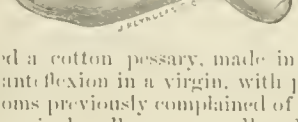
On reading the article of Dr. Page, I at once procured the materials; and, following his directions, constructed with tolerable success one of his instruments. The two extremities, however, were flattened from before backward, instead of being round like the extremities of a dumb-bell, and the whole was covered with oiled silk. After replacing the uterus, the instrument was introduced; and, to my great satisfaction, I found that it held the uterus in its proper direction in the axis of the pelvis. I directed my patient to withdraw it every night; and, after cleaning the surface, place it for a while in a solution of chloral, and lay it by to dry; and further instructed her to replace the instrument every morning by means presently to be described.

No instrument that I had before introduced could be retained more than two or three days, by reason of a sense of tenderness in sitting down, which was by that time inevitably felt in the perineum.

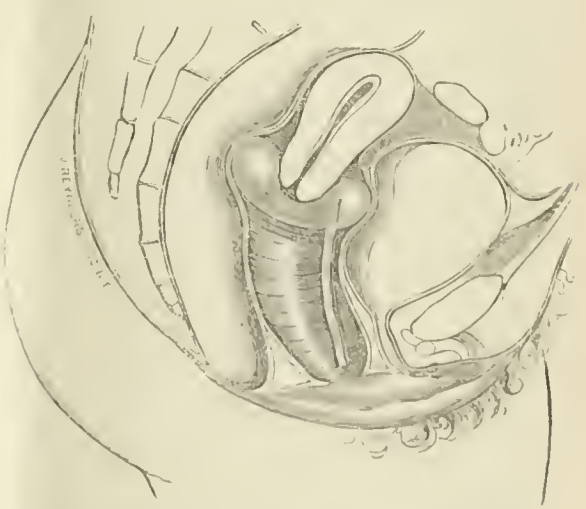
When, however, this time had elapsed, my patient experienced no discomfort; and declared that, for the first time, had she been aware of any real sense of support from a pessary, or been relieved from the distressing pain in the back incident to standing or walking. Moreover, on making examination some time after removal of the instrument, the uterus was found to have retained its proper position.

The cotton becoming soon soiled, I instructed my patient in the manner of making the pessary. Dr. Page seems to make little of the trouble involved in the making the instrument, but any one who has not become expert, will find that it requires a great deal of time. It occurred to me that an instrument could be constructed on this model, from india-rubber, and filled with air or cotton, or other elastic substance. Mr. John Reynders, 309 Fourth Avenue, taking one of cotton as a model, had one made of india-rubber, which has proved a perfect success. The instrument filled with air is very light, of course very elastic; yielding, to a certain extent, to sudden impulses as from mis steps, and withal preserving the uterus in its normal position, while it raises it from the floor of the pelvis, and thus permits an uninterrupted circulation through its blood-vessels. One of its extremities passing up into the cul de sac behind the cervix, and the other pressing upward in front of the cervix, it is equally fitted for anteversion, retroversion, or simple prolapsus.

It is evident that this instrument is employed to the best advantage in a vagina in which the anterior wall is yielding, so that the end of the pessary can pass well up in front of the cervix. If open at all to the objection brought against pessaries in general, that of distending the vagina, this action is limited mainly to its long diameter, the instrument lying in the axis of the canal, and being of a diameter too small to distend it materially in a lateral direction.



I have used a cotton pessary, made in this way, in one case of anteflexion in a virgin, with perfect relief to the symptoms previously complained of; in this case the anterior vaginal wall was unusually relaxed.



I have no idea that this form of pessary is destined to supplant all others; but as an expedient in the class of cases of which the first one referred to is an example, I am certain it will prove a most valuable acquisition to our resources. Every practitioner has at times cases in which the uterus, remaining enlarged from defective involution, is crowded down to the floor of the pelvis by the weight of the superincumbent intestines, with the bladder pressed upon by the fundus, and the cervix pushed against the rectum, or lying in the directly opposite position; with the uterus more or less œdematous from retarded circulation, and a generally relaxed state of the system from protracted ill-

health, and has had occasion to deplore the inefficiency of all instruments in common use. To such I would most heartily commend a trial of the dumb-bell pessary. It differs essentially in form, so far as my acquaintance with them extends, from all pessaries previously constructed. The term "dumb-bell" sufficiently designates it and its modifications.

In the *Atlanta Medical and Surgical Journal*, June, 1875, will be found an abstract of a paper communicated to the Georgia State Medical Society by Prof. H. F. Campbell, of Augusta, Ga., upon the treatment of uterine displacements by the knee-and-breast position. While giving full credit to Dr. Sims for making the profession acquainted with the great advantages of this position in explorations of the vagina, Dr. C. urges its great value as a means of relief in the various forms of uterine displacement. The advantages of this measure are certainly not unknown to those who are familiar with Dr. Sims' teaching and practice. Dr. Campbell, however, deserves the credit of bringing before the profession in a very clear light the benefits to be derived from this change of position, and of showing how its efficiency can be most thoroughly secured, as well as of enforcing these advantages in a manner to challenge attention. By diagrams he shows how completely, when the woman is placed upon her knees and breast, *with the thighs vertical*, the abdominal viscera fall away from the uterus, leaving it more or less completely to the influence of gravity, and causing a reduction of its displacements. On assuming the knee and chest position, the structures at the outlet of the vagina are almost invariably brought into close contact, and, acting as a valve, exclude the atmospheric air; but, instantly, upon retraction of the perineum, the atmospheric air rushes, generally audibly, into the vagina, and the canal becomes converted into an ample, dome-like cavity, and the pelvic viscera are allowed to gravitate still more readily toward the diaphragm. Dr. C. has contrived a tube of glass which he calls a "pneumatic self-repositor," which I have found extremely convenient for the purpose, with which the patient is furnished, and she is instructed as to its introduction. The great advantage of the "inverted gravity" plan consists in its affording to the patient with a dislocated uterus the means of self-replacement. Every one is familiar with the difficulties sometimes encountered by the physician in effecting reposition of a displaced uterus, with the woman in the dorsal position—his efforts resisted by the weight of the superincumbent viscera and the muscular walls of the abdomen. By the knee-and-breast position, unless there be adhesions, the patient accomplishes the reduction for herself; and, by adopting certain precautions in the manner of lying down, may preserve to a considerable degree the advantages gained, so long as she keeps quiet. The comfort derived by these patients, as well as by pregnant women, by even a few minutes' occupation of the position, is often very considerable.

The knee-and-breast position I have found of incalculable value in preparing the way for the introduction of the pessary by the patient herself. In extreme cases of anteversion it is sometimes quite impossible for the patient, unaided, herself to introduce an instrument behind the cervix. Let her, however, upon rising, while still undressed, assume the genu-pectoral position, and, reaching up, introduce the glass tube into the vagina. After remaining in this position a few minutes, or until it becomes irksome, let her quietly drop upon her left side, with her right limb drawn up as high as possible, and with the breast still inclining toward the bed. She can with the right hand, assisted more or less by the left, introduce with perfect facility a pessary, which will pass readily beyond the cervix. When the dumb-bell pessary is employed, it should, after being lubricated, be introduced with its concavity toward the coccyx, and pushed along the vagina until the anterior extremity has disappeared under the pubis, when, often spontaneously, or, at least, with slight motion imparted by the finger, the instrument will rotate on its axis, and the extremities occupy their respective positions before and behind the cervix. That the knee-and-breast position is a preliminary indispensable to their success is stated most emphatically by those patients who have attempted to introduce a pessary under the usual conditions and have failed.

From the combined employment of the knee-and-breast position and the dumb-bell pessary I cannot but confidently anticipate a greatly increased satisfaction and success in the management of hitherto intractable cases of uterine displacements.

NOTE.—A looped tape is attached to the anterior extremity of the dumb-bell pessary, to facilitate its removal by the patient.

The glass tubes are made by J. Reynders & Co.

A CASE OF PARALYSIS OF BOTH VOCAL CORDS, FOLLOWING A FALL UPON A WHEEL-BARROW.*

By BEVERLEY ROBINSON, M.D.,

ONE OF THE PHYSICIANS TO CHARITY HOSPITAL, NEW YORK; SURGEON TO THE MANHATTAN EYE AND EAR HOSPITAL, ETC., ETC.

J. B., 43 years of age, was seen by me for the first time on January 6th, 1876. Four months previously, while in the act of wheeling a load of dirt in a barrow up an inclined plane from a cellar to the street in front, he slipped and fell a distance of four feet. In his fall, his throat came into violent contact with the hind part of the barrow, and he instantly felt a sensation of cracking, and a considerable degree of localized pain.

For a few hours after his accident he expectorated every few moments small quantities of blood, bright red in color.

Twenty-four hours later he began to spit muco-pus mixed with blood. During this time his neck was swollen exteriorly; and the night of the fall my patient could not sleep on account of "the choking" occasioned by the phlegm in his throat. The dysphagia persisted, and was annoying for three or four weeks.

Little by little this symptom improved, and he now swallows as usual (Jan. 6th). There was nearly complete aphonia for 15 days. The loss of voice did not manifest itself so soon, however, as the difficulty of deglutition. In fact, until several hours had elapsed after his fall, it appears to him that he spoke tolerably well. When it did become evident, his voice was reduced to the faintest whisper. By degrees it returned. He is still slightly hoarse, and more especially in the morning, when he can scarcely make himself understood. During the day his voice acquires greater strength, and towards evening he can converse for a time, about as usual. He complains of the sensation of a lump in his throat,

* The patient was shown to the members of the New York Laryngological Society, at a stated meeting.

actually, which rises constantly, and it seems as if it would choke him should he be prevented from swallowing every few moments. Since his accident, his throat is very dry, and he is forced to drink water very frequently in order to render his life bearable. There is slight cough, which he has had from the time of his fall. Prior to this occurrence, he had always been a perfectly healthy man.

On palpation of the larynx, there is at present (Jan. 6th) no evidence of an ancient fracture. The outline of the thyroid cartilage is absolutely normal. There is no pain on moderate pressure, and the patient swallows easily. He is apparently obliged to use some effort in order to render his articulation of sounds distinct. And he states, when asked, that after prolonged conversation he feels great fatigue in the throat. If he attempts to raise his voice immoderately, it immediately becomes squeaky. He has especial difficulty in sounding clearly the very low notes, and is not able to modulate his voice in conversation.

Examination of the larynx with the aid of the laryngoscope shows some thickening of the interarytenoid commissure; congestion of the vocal cords anteriorly; left ventricular band swollen; small superficial ulcerations along the free border of the epiglottis.

In phonation, the glottis presents a decided oval in its ligamentous portion; the vocal processes and cartilaginous portion of glottis act normally.

Treatment.—Application of ferri perchlor. (℥ i.–℥ i.) to the epiglottis and the interior of the larynx.

Jan. 13th. In phonation, the right vocal cord makes a more convex outline, considered exteriorly, than the left. The left vocal cord leaves the median line more slowly than the right, while the patient inspires. Congestion persists; speaks with less difficulty; voice stronger; choking sensation not so intense. Treatment—ut supra.

Jan. 15th.—Same condition.

Treatment.—Ferri perchlor.; emplast. cantharides over larynx.

Jan. 19th.—No change. After this date I lost sight of patient, and am not familiar with his future history.

Already I have reported a somewhat similar case to the above in the MEDICAL RECORD of May 1st, 1874. The present one differs notably from it in two particulars. 1. The cause, which was a fall, not a blow. 2. The result, which was bilateral palsy of the larynx; not unilateral.

This is, so far as I know, a unique case; and for this reason, if for no other, worthy of being recorded.

Its physiological interpretation is interesting, and to me the simple and natural one appears to be nearest the truth. Both recurrent nerves were either severely contused or lacerated at the time of the accident, owing to direct compression of them by the larynx and trachea. For a complete discussion of the pathogeny of an analogous example of contusion of the larynx, in many of its features, I refer my readers to the article quoted above.

PATENT FOODS.—The *Lancet*, in a recent number, speaks against the principle of advertising patent foods, the ingredients of which are not publicly stated.

SOCIETIES FOR THE PROTECTION OF INFANT LIFE in France held a Congress on the 19th.

Progress of Medical Science.

GENERAL PROGRESSIVE PARALYSIS IN ITS RELATION TO SYPHILIS.—A posthumous paper on this subject by Dr. Jespersen has recently been published, and embodies some very interesting statistics.

The author refers briefly to the impressions prevailing among investigators concerning the syphilitic origin of paresis. Before 1857, when Esmarch and Jessen brought forward their well-known hypothesis, no one had definitely affirmed that syphilis was the cause. Several recent authors have published histories of a few cases where syphilis had been present, but, in reality, Steenberg, Kjellberg, and Sandberg are the first who investigated the question with thoroughness. The author had the opportunity of examining all that could be ascertained with regard to a syphilitic history in 123 paralytic patients treated at the St. Han's Hospital between January, 1863, and May, 1872. Among them, constitutional syphilis was found to be present in 83; chronic, in 6; "syphilis in the highest degree probable" in 6; in 13 there had been "a genital affection, gonorrhœa or the like, which might possibly indicate syphilis;" and in 15 there was nothing indicative of syphilis.

Of 59, the author could state pretty accurately how long after the acquisition of syphilis the paresis commenced; 5 to 9 years in 34; 10 to 14 in 15; 15 to 19 in 13; 20 to 28 years in 7. In a considerable number of cases he ascertained what form of syphilis had preceded the paresis. Generally they had been mild cases, and not the rarer destructive forms. The paresis usually did not become developed until after several years (at least four years) after the last symptoms of syphilis. Only in a single case did he find characteristic symptoms of syphilis occurring during the course of the paralysis; doubtful eruptions (unclean ulcers) occasionally presented themselves, however, towards the end of the patient's life. Of the whole number there were only 10 females, the remaining 113 were males, generally at the most vigorous period of life. The author finds that the prognosis is far more unfavorable in the form of paralysis than in syphilitic brain diseases. The treatment involves the use of anti-syphilitic remedies at the earliest possible period.—*Hospitals-Tidende*, No. 34.

NEW METHODS IN ESMARCH'S BLOODLESS OPERATIONS.—In a lecture by Prof. Esmarch, separately republished from Langenbeck's Archives, some new applications of the elastic bandage for bloodless operations are given. He there alludes to his successful use of this appliance, in a case of myxosarcoma of the right axilla, which necessitated removal of the whole arm, with the scapula, and outer half of the clavicle. He found the plan very efficient in preventing hemorrhage during an operation he undertook for the relief of a man, almost the whole of whose penis, with the anterior surface of the scrotum, had been destroyed by an epithelial cancer. He passed the tubing twice round the stump of the penis and root of the scrotum, crossing the ends over the pubes, and then again over the sacrum, and finally fastened them in front around the belly. Prof. Esmarch also describes two new little pieces of apparatus, devised for securing the ends of the elastic cord after the limb is encircled by it. The one is by Mr. Foulis, of Glasgow, and consists of two short pieces of brass tube, soldered together side

by side, and one of which is slit open lengthwise. Through this slit, the ends of the stretched cord are lodged in the tube, and contracting, hold each other securely. Prof. Esmarch thinks he accomplishes the same object with less injurious pressure upon the limb, by having the split tube soldered to a small, flat brass plate, instead of using the double tube of Foulis. In reply to the question how long the principal parts of the body may be kept in the bloodless condition, he says that the two lower extremities may be kept so completely for two hours and a quarter without injury.

Esmarch on the Treatment of Deep Atheromatous Cysts of the Neck.—In a lecture in Berlin, before the German Society for Surgery, Prof. Esmarch described the following as his method of treating these cysts, considering it as much safer than extirpating them. He makes a puncture, with a small hydrocele trocar, and verifies the diagnosis by microscopic examination of the fluid withdrawn.—He then proceeds to wash out the sac thoroughly by repeated injections of a one-per-cent solution of carbolic acid, until the water returns clear. Lugol's solution is now injected, and retained for a few moments, until by gentle rubbing it is brought into contact with the whole internal surface of the cyst. The sac generally soon fills again, and becomes somewhat painful; but it soon shrinks, and the cure is complete after a variable period.—The paper is accompanied by lithographs, explanatory of the cases which are given in illustration.

Nerve-Stretching in Affections of the Nervous Centres.—Some years ago Prof. Nussbaum, of Munich (*Aerzl. Intelligenzbl.*), published the history of a case of tonic spasms and pain, which arose as a sequence of a concussion of the arm. The affection was cured by the stretching of the brachial plexus. Since then, other surgeons have successfully applied the same method in different nervous affections. The professor restored by his method last year, a patient who had been suffering for nine years from a reflex epilepsy that had caused five or six convulsive attacks daily. These were announced by pain in the terminal branches of the great sciatic nerve, and ceased after the stretching of the great tibial nerve. Experiments, made afterwards with animals, have shown that a slight stretching of the nerves increases the reflex action, while a stronger stretching reduces it.

Recently, a patient whose lower extremities had been paralyzed for eleven years, applied for help. He was, besides, very much troubled with clonic spasms of the lower extremities. His deplorable state was made still worse by a paralysis of the bladder and of the rectum. The disease was caused by a fall upon the sacrum. When the patient heard of the first result obtained from the nerve-stretching, he hoped to get rid of his spasms by the same method. But, as the trouble was doubtlessly caused by an affection of the nervous centres, the professor could hardly be induced to comply with the wishes of the patient. Nevertheless he was at last persuaded to fix a day for the first operation.

Beforehand, a diluted solution of carbolic acid of the strength 1.20 was prepared. This was intended for cleansing purposes, as well as for the spray and for the moistening of compresses.

When the spray was directed towards the inguinal region, the doctor made an incision through the skin, as if he intended to tie the femoral artery near Poupart's ligament. Then he cut through the fascia, isolated the crural nerve, brought his right forefinger under it like a hook, and pulled it so strongly that the foot changed its position. He then took the nerve between his thumb and forefinger and pulled it first towards its root, and after that towards its termination. When this was done the nerve appeared somewhat prolonged. Next, he washed the wound with diluted carbolic acid, introduced a drainage tube into its lowest part and closed it with antiseptic silk. The whole inguinal region was afterwards covered by a compress moistened with diluted carbolic acid.

The patient was then placed upon his abdomen, because of a similar operation which was to be done with the great sciatic nerve. The skin was for this purpose cut between the tuber ischii and the trochanter major. After the operation was completed and the patient had regained his consciousness, he exclaimed that he felt entirely relieved of the spasms in his right extremity. The wounds healed within a fortnight, after which the nerves in the left extremity were operated upon with the same good result. But he was benefited by these operations in another way. As the spasms of his legs had ceased, he could put on mechanical instruments, and was thus enabled to walk around his room.

Continuous Aspiration in Thoracentesis.—When a large amount of pus is suddenly withdrawn from an empyemic cavity, it either soon reappears there, or there is apt to be a hemorrhage, both of these conditions being due, according to Mr. Hewitt, to the pressure being suddenly removed from the vessels in the pleural tracts. To obviate this danger the following procedure is recommended, when the ordinary trocar and canula have been used. First of all, a caoutchouc tube is to be passed through the canula into the empyemic cavity. Then the canula is to be withdrawn and the outer end of the caoutchouc tube is attached to a glass tube piercing a cork and reaching to the bottom of a vessel containing a weak solution of some antiseptic. By gently lowering and raising the bottle the cavity is cleansed, and by changing the first bottle for others the cavity is evacuated of pus and filled with the antiseptic solution. The amount of fluid in the cavity is lessened daily, by keeping the bottle at a lower level than on the previous day. By this mode of operation Mr. Hewitt thinks that pus will form less rapidly, and that there will be less danger of hemorrhage.—*British Medical Journal*, March 11, 1876.

A Case of Pica.—Dr. A. M. Gould was consulted a short time since by an unmarried lady of forty-three years, who had generally enjoyed good health. She had menstruated regularly till within a year, when there was a profuse menstrual flow, of an unnatural muddy color. She had craved unnatural food for over two years, and at the time of the visit was eating fine sand as an article of diet. She was seized with this desire by seeing some workmen putting sand upon a road. There was more or less dyspnœa, the bowels were constipated, the tongue was clean, but her appearance was that of a strong and healthy person. The heart and lungs were not examined. Laxatives and iron were prescribed. About four months after, the doctor again saw the patient, and found the appetite for the sand as strong as ever. As a substitute, two ounces of carbonate of iron, a teaspoonful three times a day, was ordered. So long as she used the iron she could refrain from the sand-eating. She said she had nearly eaten a bushel, and she baked the sand in order to destroy anything that might be injurious in it.—*The Boston Medical and Surgical Journal*, April 13, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, May 6, 1876.

THE AFFAIRS OF THE HEALTH OFFICE.

WE are not surprised to find at the completion of the investigation into the management of the affairs of the Health Office, that Dr. Vanderpoel has vindicated his conduct to the entire satisfaction of his friends. Despite the damaging testimony which has been brought before the Assembly Committee, we have been hopeful from the first, and expressed such a disposition in our last issue when referring to the charges. It was impossible, however, in view of a general professional feeling of anxiety upon the subject, to ignore the claims of an impartial discussion, and in that view we opened the question. The charges of maladministration, it is true, were founded upon published reports of the doings of the Committee; but as these bore on their face the evidence of authenticity, we were forced to notice them in the presentation of one side of the argument. As we have done so in the performance of an unwelcome duty, we the more gladly seize the opportunity of presenting the other side.

As far as we can understand, the investigation took its origin from a desire to find out what were the fees of the Health Officer for the past two years, with the view of deciding upon the advisability of abolishing said fees and making the office a salaried one. For this purpose, the following resolution was passed by the Assembly:

"*Resolved*, That the Committee on Commerce and Navigation be directed to ascertain what the fees and revenues of the Health Officer of the port of New York were in 1874 and 1875, respectively; and that for this purpose they be authorized to send for persons and papers and summon witnesses, and to employ a stenographer to take the testimony."

Under this resolution, Dr. Vanderpoel was called before the Committee. Although there was nothing in the resolution looking towards any charge against the conduct of the Health Officer, the investigation drifted so far from its legitimate purpose, that his personal integrity was directly assailed.

It appears from the testimony before the Committee, that irregularities in the administration of the affairs of the office did really exist, but that Dr. Vanderpoel was wholly ignorant of them, and that they occurred against his express wishes. Although the actual facts, when sifted from the sensational element which at present belongs to official inquiries of this sort, show the irregularities to be of a comparatively trivial character, the Health Officer, in view of the responsibilities of his office, and on a question of principle, will be held more or less accountable for their existence. The worst, however, that can be said of him is, that he was not so watchful as he might have been. There is now, however, no question that his intentions were beyond reproach, which is the best possible vindication of his character for integrity.

After these few general statements in regard to the present aspect of the affair, we are prepared to examine the testimony in connection with certain specific charges. The chief complaint made was, that Dr. Vanderpoel had ten per cent. of the charge made for repairing the State boat at Fletcher, Harrison & Co.'s taken off, and applied to the bill for the repairs made by the same firm to the doctor's private boat. The facts of the case, as brought out in the testimony, are simply these: — When Dr. Vanderpoel bought the "Gertrude," it was almost worn out. He went to his friend Mr. Van Santvoord, who for many years had been engaged in steamboat building, and asked him to have the necessary repairs made. The work was done by Fletcher, Harrison & Co., whom Mr. Van Santvoord had, on numerous occasions, employed for work of his own. The bill was sent to Mr. Van Santvoord. The amount being so great, and being in fear that the repairs would exceed the worth of the boat, he, without the knowledge of Dr. Vanderpoel, and as a friendly act to him, asked for a deduction of ten per cent. This was agreed to, as a matter of business with Mr. Van Santvoord, and the bill was accordingly rendered to him; when Dr. Vanderpoel for the first time knew of the amount, and paid it accordingly. This deduction was not made on behalf of any repairs made on the State boat, nor was the bill for the repairs on the State boat made any greater thereby.

The charge that small repairs of the doctor's private boat were smuggled into the repair bills for the State boats is explained by the fact that such smuggling was due to a subordinate, who approved said bills as being correct, and which Dr. Vanderpoel believed to be correct. The doctor unqualifiedly swears that he never knew nor suspected any irregularity in the proceeding, and his testimony is not contradicted. During all this time he was paying bills for repairs from his private purse. In regard to the money obtained by the sale of "junk," it is shown to have been paid out

entirely for State property, under the authority of the old board of Quarantine Commissioners.

As to the "Gertrude's" services to the State and the many damaging aspersions made against the doctor's management of its financial affairs, it is clearly proven that the said boat was hired by the State after the burning of the "Fletcher," for twenty dollars per day, the State agreeing to find the coal and men for running her. It does not appear from the evidence that any of the State coal was used when she was not in service, or any charge made for any time she was lying idle. On the contrary, whenever she performed any accidental service for the State, such as in the case of the "Numancia," quarantined during 1872, in the Lower Bay, she delivered her earnings to the Comptroller, which in that case amounted to over sixteen hundred dollars, the only personal fees collected being those which legitimately belonged to the Health Office.

From an examination of the evidence before the Committee, we fail to see anything irregular in the practice of delivering foreign newspapers at the quarantine ferry slip. This was merely a matter of accommodation for the public, and without any direct or indirect expense to the State.

Concerning the appropriation of State labor and State property to private uses, there is a reasonable explanation. Whenever the boat was used for private purposes all its expenses were paid by its owner, but when employed officially in the State's service, State coal was burned. It seems, however, that some of the State property, in the shape of waste and oil, was used on the vessel without the same being properly accounted for. This, however, was one of the trivial matters already referred to, with which the subordinates were entrusted, and concerning which the Doctor had no immediate knowledge. The "hands" in State employ were never asked to perform service on the "Gertrude" unless said hands were for the time being off duty. Obviously this was not interfering with State interests.

It will not serve our purpose to follow the testimony in any farther detail, except to state in a general way concerning the principal and important charges that one and all are absolutely without any foundation in fact; and, far from proving Dr. Vanderpoel unworthy of his trust, the manner of their refutation is his best recommendation.

We have devoted some space to the consideration of this matter, not only on account of justice to the Health Officer as a gentleman whose integrity we never doubted, but as a matter of principle in vindicating the honor of a profession of which he has long been an acceptable member.

THE MINIMUM AGE OF PUBLIC SCHOOL ATTENDANCE.

Any one who is accustomed to visit the different public schools of this city will be struck with the crowded condition of the primary departments. This is in the main due to the custom, principally among the Germans, of sending children to school at the earliest possible age allowed by law. The parents of these infants seem to look upon the primaries more as nurseries than schools; for in no other way can the number of children between the ages of four and six be accounted for. It is preposterous to suppose that these little ones can learn anything except to sit still, sing the alphabet, and become proficient in the calisthenic drill. To the impossibility of any beneficial mental development at this age, is added the evil effects of confinement, bad ventilation, over-taxation of the nervous system, and all its attendant evils; when, on the contrary, every means should be employed, and every freedom allowed, to aid the development of the physical forces. Not only is this system of crowding these children of tender age into the class-rooms positively detrimental to themselves, but relatively injurious to the older ones, who are better able to receive instruction and more capable of intellectual development. In the present crowded condition of the schools there is no room for these infants; and not only for this, but for other reasons equally apparent, we take occasion to endorse most heartily the effort being made to prevent, by legal enactment, the admission of any child below the age of six years. There is every argument in favor of the enactment of such a law, and none against it—except, perhaps, to make the minimum age seven years. Let not only this provision become a law, but let there be an amendment to it, to the effect that all the children of the primary departments be dismissed for the day at noon. The medical profession has long been agreed concerning the advisability of such measures, and the Board of Education and the Legislature are sure of its active sympathy in their laudable efforts towards reform.

Reports of Societies.

NEW YORK COUNTY MEDICAL SOCIETY.

Stated Meeting, March 27, 1876.

Dr. H. B. Sands, President, in the Chair.

DISCUSSION ON LEUCOCYTHÆMIA.

The paper on Leucocythæmia, read by Dr. E. G. Janeway, being open for discussion,

Dr. Fordyce Barker remarked that he thought its author had hardly done Dr. Hughes Bennett justice, while commenting upon the relation which he sustained to the discovery of this disease. Dr. Barker was of the opinion that, inasmuch as Dr. Bennett announced that there was no antecedent phlebitis or purulent collection in any part of the body of his patient, he was entitled to the priority in the discovery of a disease not before described. Dr. Barker then directed attention to the question of diagnosis, and asked, "Shall it be made by studying the relative

proportion existing between the red and white blood-corpuscles, or, shall it be made by studying all the symptoms which are associated with the development of the disease?" He then discussed the question as follows: First, with regard to the relative proportion existing between the red and white blood-corpuscles. Is it not a fact that microscopists agree that science is not yet able to distinguish between a white blood-corpuscle, a pus corpuscle, and a mucus corpuscle?

Science has not yet reached the point at which her aid can be invoked, either through the microscope or other means, for a successful determination of the question, whether this relative proportion is an absolute increase of white blood-corpuscles or pus corpuscles, hence the use of the term leucocytes, which applies to these three kinds of cells. Now then, I think that there are certain cases, for instance of pyæmia, where the same microscopical appearances of the blood can be found, and the general symptoms are in most respects similar to those which have been described this evening, but which, under some circumstances, are curable. If memory serves me right, the normal proportion of leucocytes in the blood is about 1 to 350 or 400 red blood-corpuscles. Pathologists, I believe, have agreed that the term leucocythæmia is not to be applied to any case unless the ratio between the red and white elements in the blood is changed to such a degree that the leucocytes are found in the proportion of 1 to 20 red corpuscles.

Now, I have seen cases where leucocytes have been present in the blood in the proportion of 1 to 12, 1 to 14, 1 to 8, etc., and the patients subsequently have made a good recovery. The question may now be asked, Were these cases of leucocythæmia? My answer is, that they were not; but I regarded them as cases of pyæmic infection. The question then next arises, is it an essential feature of the disease, that this ratio, or vastly increased proportion of white to red blood-globules must be associated with splenic, or hepatic, or glandular enlargement, or disease of the marrow of the bones? If that be necessary, we have no right to make a diagnosis of leucocythæmia from a microscopical examination of the blood alone; but we must have associated with the increased relative proportion of white blood corpuscles, of leucocytes, splenic hypertrophy, glandular changes, hepatic enlargement, or disease of the marrow.

But at this point in our inquiry we meet with another difficulty; for we have to settle the question whether the blood change is the primary essential element of the disease, or whether it is simply the result of other essential lesions; just as dropsy is a result of a primary lesion of the heart, kidneys, or liver? That question is not yet settled. If we assume that all the cases of leucocythæmia are the result of certain essential splenic or glandular or hepatic disease, or disease of the marrow of the bones, then we have a new difficulty of diagnosis—the fact that all those symptoms which are found to characterize true leucocythæmia exist in certain cases with the entire absence of any evidence whatever of splenic, hepatic, glandular, or marrow disease.

I remember very distinctly a paper by M. Boufilo, published some twelve or fifteen years ago, in which he reported cases which had all the characteristic phenomena of leucocythæmia, such as the dyscrasia, the pallor, the asthenia, and finally death, without any evidence of glandular, hepatic, or splenic changes. Since that time, other cases of like character have been published. In Hays' Journal, a few years ago, Dr. Horatio C. Wood published a paper upon what he terms "Pseudo-leucocythæmia."

All will agree as to the importance of a correct diagnosis between a disease which has thus far proved to be beyond the resources of any remedial treatment, and another disease which may closely resemble it in its attendant phenomena. I would not say that the symptoms are precisely the same; for I think a careful study of the two diseases will show some characteristic differences. For example, I think pyæmia always causes rapid emaciation, while in leucocythæmia there is anæmia and asthenia, but not necessarily emaciation. I saw in 1862 a lady from Philadelphia, who had leucocythæmia of the typical glandular form. A few weeks after, I saw her again at Newport with Dr. King, of that city, the day before she died of asthenia. But, in her case, there was no emaciation, for although she was very pallid, she was a fine specimen of *embonpoint*. There was also no appearance of emaciation in the case of a gentleman in this city, who died of glandular leucocythæmia, although he had repeated attacks of hemorrhage from the nasal passages and also from the bowels. Again, I think there is a marked difference between the thermometric phenomena of leucocythæmia and pyæmia. The fever of leucocythæmia is only manifest in the advanced stage of the disease; it is a hectic, and the thermometer I have never seen indicate a rise of more than two or three degrees above the normal standard. Now, in pyæmia, the fever is a constant phenomena, with marked variations during the day, often from four to six or more degrees.

Dr. Barker then briefly described some cases of pyæmia which he had seen, in which the blood-changes, as to the proportion of the white to the red corpuscles, was as great as in typical leucocythæmia, and most of the general symptoms were similar to those of leucocythæmia. One was the case of a young lady in Hartford, whom he saw two or three years since, in consultation with an able and accomplished physician of that place. Before his visit to Hartford, microscopic examinations of the blood had demonstrated such an enormous increase in the proportion of the white to the red corpuscles as to convince this gentleman that it was a case of leucocythæmia. But the absence of all evidence of splenic or glandular enlargement, the character of the attendant fever, the extreme emaciation and the antecedent history of the case, led Dr. Barker to regard it as pyæmia. Some time previously she had pelvic cellulitis, which terminated in abscess with recurrent purulent discharges into the rectum. The patient died a few weeks after he saw her; and, strange to say, the result of an autopsy confirmed her physician in his opinion as to the nature of the case, while it equally convinced Dr. Barker as to the correctness of his own diagnosis. He then alluded to other cases which had come under his own observation, in which the blood-changes and the general symptoms would seem to warrant the diagnosis of leucocythæmia, but who had eventually recovered their health. One was that of a lady whose history was very much the same as that just mentioned. Another was that of a young man who had several times had suppurative tonsillitis. He had the blood-changes and many of the symptoms of leucocythæmia, as entire loss of appetite, great prostration, a feeble heart-action, hemorrhages, and recurrent diarrhœa, from which he would rally by the use of very large doses of quinine and alcoholic stimulants. The tonsils were honeycombed with small abscesses, from which pus could be made to exude from numerous little openings by pressure.

He perfectly recovered his health after the tonsils were excised by Dr. Morell Mackenzie, of London.

In conclusion, Dr. Barker added that he who will clearly demonstrate the differential diagnosis between the one disease, which, so far as we know at present, is incurable, and the other, from which patients do sometimes recover, will render an important service to medicine as an art, and to humanity.

Dr. Heitzmann referred to a case of leucocythæmia which came to his notice, where the patient sought relief for stone in the bladder. He had had several attacks of malarial fever; his spleen was much enlarged, and his blood contained a large proportion of white blood-corpuscles. Diagnosis was uncertain before any operation was performed. The stone, however, was removed by the lateral operation; and shortly after the wound began to bleed, and a fatal hemorrhage ensued, the patient dying within two and a half hours.

Dr. Heitzmann also referred to the fact that hemorrhages not infrequently occurred, which were altogether out of proportion to the size or depth of wound made upon the bodies of pregnant women, and that, undoubtedly, there was in such cases an excess of white blood-corpuscles.

The doctor further remarked that it was impossible to decide where the disease came from, for the reason that we did not know from whence the white blood-corpuscles were derived.

Dr. Heitzmann disagreed with Dr. Barker's statement that mucous corpuscles were not distinguishable from white blood-corpuscles; for, by means of high powers, he believed the microscopist was able to recognize the fact that the mucous corpuscles were much more finely granular, and had a distinct internal structure which could be easily demonstrated. He agreed, however, with Dr. Barker in the belief that we did not have means of discriminating between pyæmia and leucocythæmia by a simple microscopical examination of the blood.

Dr. Janeway remarked that in examining the blood there was a great liability to mistake the swollen red blood-globules for white blood-globules, especially by those unaccustomed to making such examinations. The crenated appearance of the red blood-globules produced by evaporation might be easily mistaken for white blood-globules. He called attention to the fact, also, that increase of white blood-globules was a feature of leucocytosis, or symptomatic leucocythæmia; and yet the patient did not have true leucocythæmia. Increase of white blood-corpuscles might be found in connection with many chronic diseases, such as cancer, phthisis, malarial fever, etc. On the other hand, however, patients might have malarial fever or cirrhosis with enlarged spleen without having a marked increase of white blood-corpuscles, one of the leading features of leucocythæmia.

He further remarked that, with regard to diagnosis, the existence of splenic and glandular enlargements and the entire absence of blood-changes, was one of the difficult features of leucocythæmia and pseudo-leucocythæmia which at present remained to be explained.

The doctor also regarded it as possible that the deep-seated glands might be enlarged, while the superficial ones remained unchanged, and yet recovery take place. In that instance, the cases would be placed under the head of non-enlargement of the glands.

Dr. Janeway also restricted the term pyæmia to those cases in which, from thrombosis and embolism, secondary abscesses were developed in organs distant from the seat of the primary injury. Those cases which presented very much the same phenomena as seen in pyæmia, but in which there were no secondary abscesses, were placed under the head of septicæmia. In accordance with that view, he did not regard Dr. Barker's cases as pyæmic. The doctor was also of the opinion that the glandular hyperplasia, which goes with pyæmia, uterine disease, etc., might explain the increase of white blood-corpuscles in those cases.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, April 12, 1876.

Dr. Chas. K. Briddon, President, in the Chair.

CHONDRO SARCOMA OF FEMUR.

Dr. E. Mason presented a specimen of tumor of the thigh which he had removed by operation from a widow, a patient of Roosevelt Hospital, aged 35 years. She presented a delicate appearance, and her family history was that of phthisis. Five years before admission, she suffered from pain along the outer aspect of the left thigh, from the hip to the knee. The pain increased, and after subjecting herself in turn to the sulphur and water-cure treatment, it abated somewhat. Five months ago she first noticed a small tumor in the front part of the left thigh just below the groin. At first the growth was soft and painless, subsequently enlarging with rapidity; it became hard and tender, and became the focus of a pain extending to the hip and down the thigh. On admission, a tumor was discovered on the antero-lateral aspect of the thigh, two and a half inches before the anterior superior spinous process, extending internally as far as the median line, and backward as far as the great trochanter. Vertically it measured 3½ inches, and transversely 5¼ inches. The circumference of the thigh over the tumor was 20¼ inches, and over corresponding portion of opposite thigh 18½ inches. The Sartorius muscle and femoral artery skirted over its inner margin. It was hard to the feel, its margins ill-defined, and it was apparently connected with the bone. The skin was not adherent. There was no enlargement of the inguinal or lumbar glands, and no growth was detected in the pelvis. Rotation of the thigh caused considerable pain, as well as any stooping posture which she might assume. The operation was performed March 27. A simple straight incision exposed the surface of the tumor, which presented a shining appearance. It was situated directly below the capsule of the joint, and was evidently connected with the bone. All around the margin of the growth there were distinct spiculæ of bone. After the tumor had been superficially disconnected, an attempt was made to detach it from the bone: but on so doing the sac ruptured, discharging a bluish starchy material. What remained of the tumor was then removed; the bone surface and the spiculæ were cut away with a chisel. The whole surface of the exposed bone was scraped, and preparations were made to close the wound. At this time, however, it was noticed that, in a depression of the bone, there was exuding some of the same kind of starchy material already noticed, evidently from the deeper parts below. In the attempt to scoop out this material, the necessary turning of the instrument caused it to drop into a cavity in the bone, disclosing a soft pulsating mass of diseased tissue. It was the opinion of the consultation that immediate amputation at the hip-joint was necessitated, but the consent of the patient not having been previously obtained, that operation was not performed. The wound was then closed up. For several days the

patient did badly, but at the time of making the report her condition had much improved.

Dr. DELAFIELD, to whom the tumor had been given for microscopic examination, reported that the sac was composed merely of connective tissue and spiculæ of bone. The gelatinous substance adhering to the inner wall of the sac was composed of basement membrane, partly fibrillated, partly granular, and partly hyaline, in which was imbedded round fusiform and stellate cells, which resembled those of hyaline cartilage. It seemed to be a tumor composed of cartilage tissue, with an excess of cells, a considerable admixture of ordinary connective tissue cells, and belonged to the class called chondro sarcoma. In regard to the prognosis of these tumors, he remarked that it was very uncertain, some had never returned, and others had made their reappearance with great rapidity. Although in that particular instance the prognosis was bad enough, the case was nevertheless not absolutely hopeless.

A SYMPTOM OF BONY TUMOR.

Dr. MASON remarked that there was one feature in this case which, in his opinion, had an important chemical bearing, he having noticed the same symptom in similar tumors connected with the bone. This symptom was a pain, deep seated and severe, which ante-dated the appearance of the tumor for years.

MORBUS COXARIUS—EXSECTION, ETC.

Dr. MASON presented a second specimen, consisting of the head and trochanter of the femur, removed by operation from a boy, twelve years old, likewise a patient of Roosevelt Hospital. The patient enjoyed excellent health until two years ago, when he began to show symptoms of morbus coxarius. As far as could be ascertained he had never received any injury. When admitted to the hospital, the thigh was flexed upon the pelvis, and the leg upon the thigh; the limb was adducted, and, together with the existence of numerous sinuses in the neighborhood of the joint, showed that the disease had passed to the third stage. Dead bone being detected through one of the sinuses, exsection was advised and performed accordingly.

The disease of the femur was found located at the neck of the femur and just at the margin of the head of the bone. The cartilaginous portion of the head was intact, and the ligamentum teres was uninvolved. The deeper portion of the acetabulum was extensively diseased, but it had not advanced to perforation.

The point of interest was the seat of the disease in the neck of the bone and the interior of the head of the latter. The question was, did the disease originate in the acetabulum?

PUERPERAL FEVER, INFLECTION FROM OVARY THROUGH RETRO-PERITONEAL GLANDS.

Dr. MARY PUTNAM JACOBI presented a specimen of uterus removed from a negro woman who died in the hospital from puerperal fever. She was in a ward in which there never had been any case of puerperal fever. Two days before her death, and four days after her confinement, a woman had died in the hospital thirty six hours after confinement, of advanced disease of the kidneys. This case was mentioned, in order to explain to a certain extent why no anxiety was manifested about this case until just before death. Within thirty six hours after her confinement, when there had been no previous disease in that ward, she was seized with fever, which gave a temperature of 104 F. in the evening, but which went down to 101 the following morning. It then settled to 103 in the evening for four or five days; and until the fifth day she had no evening rise. During this time she never complained of any pain; in fact there was no other symptom except the moderate degree of fever.

The night before she died she got up and appears to have lain on the floor ten hours. The next morning, six hours after the occurrence, she was seized with a violent chill, followed by fever, from which she died in twelve hours.

At the autopsy there was a great quantity of flakes of pus lying over the great omentum. The peritoneal vessels were injected, but the intestines were not agglutinated. Half a pint of liquid pus was found in the cavity of the pelvis, but there was no exudation over the peritoneal surface of the uterus, neither was there any evidence of inflammation of that organ. This was the only interesting point—the left ovary was covered with a purulent exudation; and notwithstanding it had been for a long time immersed in hardening fluid, it was, compared with its annexa likewise treated, almost disintegrated. The Fallopian tube was filled with puriform liquid up to the opening in the uterus, but not beyond it. The internal surface of the uterus was healthy. A chain of retro-peritoneal glands, extending from the pelvis very nearly to the diaphragm, were enlarged and covered with pus, seeming to point to a direct infection from the inflammation of the left ovary. The interpretation of the case was, that the first fever, lasting a few hours, was connected with inflammation of the left Fallopian tube; that it proceeded by continuity to the left ovary; after that, the inflammation was arrested, and coincidently with that arrest the fever fell; but the retro-peritoneal glands were slowly infected; thus constituting the channel by which the blood was poisoned.

STRICTURE OF SMALL INTESTINE.

Dr. SATTERTHWAITE presented a specimen of stricture of small intestine taken from an Irishman aged fifty years, a patient of Dr. Hadden. The patient was taken sick in February last with some bladder trouble. In the course of the treatment, Dr. Hadden's attention was directed to a strangulated hernia. This was reduced without any special trouble, but immediately afterwards the patient was seized with peritonitis in the course of two days, after which he died.

The autopsy, which was made by Dr. Hadden, revealed general peritonitis. At the point where the hernia had been reduced the intestine was hardened, inflamed and congested, and marked the situation of the stricture. In fact, three strictures were discovered at this point. The lower one was twelve inches above the ileo cæcal valve, about three inches above this another, and three and a half inches a third. The middle one was very tight, not admitting the little finger. Between them the intestine was deeply congested, and in some places the mucous membrane seemed to be eroded.

THE PLAGUE in Mesopotamia is increasing. At Hillah, from April 1 to 7, inclusive, 114 persons were attacked with the disease, and 56 died. On April 8, there were 22 attacks and 13 deaths, and on April 9, 31 attacks and 11 deaths. At Bagdad, from April 2 to 8, inclusive, there were 256 attacks and 169 deaths; on April 9, 74 attacks and 13 deaths, and on April 10, 56 attacks and 26 deaths. The highest number of cases registered in any single day was on April 9. Cases have occurred in the military hospitals and garrisons.

Correspondence.

MEXICO AS A RESIDENCE FOR INVALIDS.

Letters from Prof. E. R. PEASLEE, M.D.

III.

City of Mexico, *March* 14, 1876.

Mr. Editor:—In order not to trespass too far on the space of the Record, I now close what I have to say from this point of observation with some very miscellaneous remarks. So far as the habits of the people of the Mexican basin, respecting food, are concerned, I have nothing to remark; except that the Indian population (descendants of the Aztecs) live and labor hard upon a surprisingly small amount, and this consisting in great part of fruits not regarded as containing much nutriment. They seldom take meat, but, instead, use beans, and Indian-corn ground upon stones by the women and made into tortillas, without any admixture of lard, butter, or salt. But of a particular drink, used by almost every one in the Mexican basin, I should speak more at length. This favorite beverage is called pulque (pronounced pool'kay); and it is found that a pint a day at least is used, on the average, by every man, woman, and child in the city of Mexico; amounting, for a population of not over 250,000, to more than 31,000 gallons a day. Special trains, laden with pulque alone, are sent daily to the city, and it is brought in from all other parts not reached by railroad, in carts, or on the backs of mules. It is seen everywhere, it is everywhere smelt, and is everywhere being drunk, though the lower classes alone are seen to drink it by the tourist, as he traverses the streets; the educated class, however, drinking it equally at home. The single railroad terminating in Mexico receives $900 a day for the transportation of this liquor, the greater part of it being produced within 50 miles of the city. There are immense estates (haciendas) which produce nothing but pulque, and this is found always to be a lucrative business. This drink is the fermented juice of the maguey-plant, as it is here called—the Agave Americana, or century-plant.—a species of cactus. It has the appearance of milk, with the taste of sour buttermilk; and to which another very disagreeable taste is added, and a smell still more disagreeable, owing to the fact that it is, to a great extent, transported in hog-skins. Very evidently one must learn to like it. A quart is sold for from 3 to 5 cents, and this amount is not seldom swallowed by the drinker within 5 to 15 minutes. Used in great excess, pulque produces intoxication; and a distinguished Mexican judge remarked that the greater number of crimes implying violence, in this part of the country, are committed under its influence. On the other hand, it is generally regarded as quite nutritious, and seems much to resemble whey in this respect. Pulque is produced in the following manner: The maguey-plants are set 10 feet apart, in rows 20 feet apart, and require 6 to 7 (sometimes even 15) years to attain to the required maturity; when they are 4 or 5 feet high, and of the same diameter, as measured across their long, thick, and very succulent leaves; which radiate in all directions from the bulb or stump, 12 to 18 inches above the ground. They are 40 or more in number, and a single leaf has been found to weigh 160 pounds. When the plant begins to shoot up a flower-stalk, the latter is cut off, and a cavity is scooped out of the stump below, holding one to four quarts, according to the size of the plant. The juice exuding into this receptacle is collected daily by means of a pipette on a large scale, which takes it up by suction and transfers it to the vessel receiving it. The inside of the cavity is then lightly scraped, to excite further escape of the fluid; and thus being constantly increased, it often finally becomes larger than the largest bucket. This treatment exhausts the plant in six to seven months, during which time it may have yielded 8 oz. to even 2 quarts daily, or an aggregate, sometimes, of 100 to 200 gallons. Some have stated the possible amount to be 400 gallons for a single plant. The juice, thus collected in vessels or in hog-skins, is either retained in the latter or poured into a tank, and in 48 hours or less fermentation is completed, and the pulque is ready for the drinker. It can, however, be kept but seven or eight days, when another change occurs, rendering it useless; hence it cannot be exported from the Mexican basin. It is sent to the city, to a great extent, in the hog-skins, but partly also in casks.

The skins are prepared as follows: An incision through the skin is made around the hog's neck and around each leg, when it is everted at the neck and stripped off whole, and wrong side out. It is then *re*-turned, and the hair removed by the action of lime, and the openings, except that at the neck, tightly tied up. Finally, it is blown up, tied at the neck, and allowed to become slightly stiff and dry, and is then ready for use. The same skin may be used over and over again for five or six months, when another hog is put in requisition. At one of the pulque stations I saw an Indian untie the string around one of the fore-legs of a skin filled with this fluid, and imbibe to his satisfaction, when he tied it up again and went his way. Of the many bystanders, none made any objection to this procedure; and it is not improbable that each of the party proposed, as he should be moved, to take his turn at one of the now closed openings of the porker's hide.

From the number and the intensity of the compliments paid, on the shortest acquaintance, by the Mexican people, they might be regarded as the politest in the world. The manner in which they put themselves, their houses, and all they possess (babies, even, included), at your service and your disposal, would entirely confound an Anglo-Saxon, did he not know that all this really means nothing. Inquire respecting one's health, and he replies, "Very well, at your service," (para servir á Usted). How did he pass the night? "In your service." You take leave of him, and he assures you that "he and his house, poor as it is, are at your service and disposal."

I take the following illustration, *apropos* to babies, from the interesting journal of a two years' residence in Mexico by Madam Calderon de la Barca. She had been greatly tried in a search for a chamber-maid, which finally proved successful, when she received a note from the Senora de ——, who begged to inform her that she (Senora de ——) had another servant at Madame C.'s disposal (otra criada á mi disposicion). Madam C. replied that she was greatly obliged, but had just hired all she needed. At this the porter opened his great stupid eyes into a slight expression of wonder. But fortunately, as he was leaving, she inquired after the Senora's health, and was told that "she and the baby were coming on very well;" when it first occurred to her that it is Mexican etiquette in this way to inform the friends of the family, of the birth of a child.

Another example from Madame Calderon de la B.

illustrates the politeness of our professional brethren in Mexico to their patients; though only those of rank can expect all that follows. I give her own language.

"I have passed nearly a week in a slight fever; shivering and hot. I was attended by a doctor of the country, who seems the most harmless creature imaginable. Every day he felt my pulse and gave me some little innocent mixture. But what he especially gave me was a lesson in polite conversation. Every day we had the following dialogue as he rose to take leave:

"Madam!" (this by the bed-side), "I am at your service."

"Many thanks, sir."

"Madam" (this at the foot of the bed), "know me for your most humble servant."

"Good morning, sir."

"Madam!" (now he stopped beside a table), I kiss your feet."

"Sir, I kiss your hand."

"Madam" (this near the door), "my poor house, and all in it; myself, though useless; all I have, is yours."

"Many thanks, sir."

He turns round and opens the door, again turning round as he does so.

"Adieu, madam; your servant."

"Adieu, sir."

He goes out, partly re-opens the door, and puts in his head:

"Good morning, madam."

Madam Calderon also gives an instance in which a French gentleman took advantage of the politeness of a Mexican, and carried home a fine saddle, which the latter included in the usual expression that all he had was at the other's service.

There is one more peculiarity of these people which I should not omit to mention. If you express admiration of a horse or carriage, or any article of personal property, it is a common thing for the owner, not only to say that it is at your service, but to send it and insist that you shall accept it. And if so, a refusal would be regarded as an affront. A distinguished physician at Vera Cruz informed me that, happening to speak in laudatory tones of a horse belonging to one of his patients, he was the next day surprised to find that the owner had sent him the horse, begging him to accept it. He did not wish to give offence by declining to do so, but has since been more chary of his commendation of the effects of others.

The city just mentioned, Vera Cruz, generally regarded as the most pestilential city in America, is certainly one of the cleanest, so far as its streets are concerned, and might probably be rendered comparatively healthy if the wall surrounding it was removed, to allow of complete ventilation of the lower stories of the houses; and if an improved style of water-closets could be introduced. I am assured that there are not a dozen in the city which in New York would be tolerated. The common statement that the first "norther" of the season here both stops the yellow fever, and kills all who are down with it, is but half true. It does not kill, but rather benefits the already existing cases. Moreover, the epidemic of last season, said to have destroyed 95 per cent. of all the cases, actually proved fatal in but 55 per cent. Twenty-five per cent. is the usual mortality.

I remain, para servir á Usted,

E. R. Peaslee.

P. S.—On my return from Mexico to Vera Cruz, the train was stopped at Orizaba by the report that the *pronunciamentiados* had broken the railroad at the Bridge of Atoyac, 30 miles below. But the government forces dispersed the marauders and repaired the road, so that we were only detained till the next day. The $25,000 demanded of the government was not paid.

E. R. Peaslee.

THE FLESH SHOWER IN KENTUCKY.

To the Editor of The Medical Record.

So much speculation has been aroused by the press of the country in regard to the recent "meat shower" in Kentucky, that I think your readers might be interested in the result of my investigation of a piece of the substance sent to Prof. Chandler, of this city.

In color it was a light pinkish red, and of rather dense texture. The piece measured about ten lines in length, and about four in breadth. Beneath the microscope, Dr. J. W. S. Arnold and I found it to be lung-tissue. We saw bronchii and blood-vessels, air cells, etc; and, from their appearance, Dr. Arnold considered it a piece of the lung of a child, or, perhaps, that of a horse—the microscopical appearance of which resembles the young human lung. The question now remains to be answered by some ingenious meteorologist—How did the babies become comminuted and distributed over the fields of Kentucky?

Allan McLane Hamilton, M.D.

New York, April, 1876.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department of the United States Army, from April 23d to April 29th, 1876.

Alexander, R., Surgeon. In addition to his present duties as post surgeon, Fort Vancouver, assigned to duty as Acting Medical Director and Attending Surgeon at these Headquarters. S. O. 43, Dept. of the Columbia, April 8, 1876.

King, Wm. H., Asst. Surgeon. Granted leave of absence for one month on surgeon's certificate of disability, with permission to leave the Dept. of the South. S. O. 79, A. G. O., April 20, 1876.

Crampton, L. W., Asst. Surgeon. Assigned to duty at Vicksburg, Miss. S. O. 77, Dept. of the Gulf, April 20, 1876.

New Mode of Obtaining Local Anæsthesia.—"M. Latamendi has found that when Richardson's apparatus is used, rubefaction and a sensation of cold is produced. If at this moment a slight incision of about half an inch is made with a curved bistoury, not deeper than the epidermis and the upper layer of the cutis, from the incised spot an anæmic zone is formed which goes on spreading. If the ether spray is continued, the region becomes bloodless, and complete anæsthesia has been obtained. The knife cuts the part like butter, the spot resembling coagulated fat. Around this an annular patch is observed, which is not so completely anæmic as the centre. The spray directed upon this renders it also completely anæsthetic. Thus the anæmia can be extended in every direction, around and up the arm. If the spray be suspended, the effects disappear quickly; but the spray being resumed, in a few seconds the ischæmia returns."—*Lancet.*

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending April 29, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
April 22d.....	0	12	80	4	51	76	16
April 29th.....	0	5	96	6	73	85	33

Puerperal Fever.—Dr. J. Braxton Hicks, in the *British Medical Journal* of April 8, reiterates his views on this subject, which he thinks is not understood as yet, nor will be until many groups of cases have been carefully studied in all parts of the world and under all possible conditions. At present the sum of our knowledge may be stated as follows: "There are many factors in the disease, all tending to the disturbance of the blood in the highly susceptible puerperal condition; each separately, or two or three combinedly, may bring about such a deterioration of the system as is evidenced by the symptoms which we have hitherto called puerperal fever."

Balard.—The well-known French chemist, who died on March 31, at the advanced age of 74 years, was Professor at the College of France, and obtained a world-wide reputation as the discoverer of bromine.

Professor Schroeder, the gynecologist, has been installed in his new professorship in Berlin, as the successor of Martin.

Medical Works in Germany.—791 medical works were published in Germany in 1875; 607 in 1874.

An Imperial Sanitary Bureau is soon to be organized in Germany. Pettenkofer, Virchow, and Hirsch are expected to take an active part in its management.

The Pathological Institute in Vienna is to receive a new life under Professor Heschl, the successor of Rokitansky. The annual sum of 2400 florins has been designated for this special department. In addition, 3,600 florins is to be given for a library, and two appointments of demonstrators are to be made, each with an annual recompense of 200 florins. Further, a sum of money is to be given for microscopes. In the course of the summer the foundation of the new building will be laid.

Death of Traube.—The medical world is called upon again to mourn the loss of another of its great instructors. On April 11, Professor Louis Traube died of pericarditis, after a long and painful illness. By Americans who have prosecuted their studies in Berlin, he will be long remembered as one of the greatest clinical teachers of Berlin, and one of the chief attractions in that medical centre. His name will be forever linked with those who have brought physical diagnosis and rational therapy to its present standard of excellence.

The Portrait of Vesalius.—It is said that the portrait of Vesalius has been discovered in the Louvre. It is by Jean de Calcar. One of the rings on his left hand bears the three letters: A. V. B. (Andreas Vesalius Bruxellensis).

M. Vleminckx, whose death was recently noticed, is supposed to have died of pulmonary embolism, the result, perhaps, of ulcerative endocarditis.

American Veterinary College.—This is the title of an institution which is now in the third year of its existence, and is, under the circumstances, in a very prosperous condition. The Faculty is as follows: A. Liautard, M.D., V.S., Professor of Comparative Anatomy, Operative Surgery and Clinical Surgery; A. Large, M.D., M.R.C.V.S.L., Professor of Theory and Practice and Clinical Medicine; A. W. Stein, M.D., Professor of Comparative Physiology; S. R. Percy, M.D., Professor of Materia Medica and Therapeutics; J. L. Robertson, M.D., V.S., Professor of Cattle Pathology and Obstetrics, and Clinical Medicine; F. D. Weisse, M.D., Lecturer on Surgical Pathology; F. Le Roy Satterlee, M.D., Lecturer on Chemistry; L. T. Bell, D.V.S., Lecturer on Veterinary Pharmacy; C. W. Crowley, D.V.S., Prosector of Anatomy; C. H. Peabody, Curator. A hospital is attached to the institution, which gives the students ample opportunities for clinical instruction. The requirements for graduation are: Twenty-one years of age; a certificate of three years study of medicine—attendance on two full courses of medical lectures—the last being in this college—a good English education, proper testimonials of character and a satisfactory written, oral, and practical examination in each department of instruction.

Cases of Scurvy in the British Mercantile Marine continue to be reported. The cause is not attributed to any failure of the supply of lime juice, but to a general impoverished condition of the system, which invited the disease, and which was due to a scanty and non-variable diet.

Legislation Against Quack Medicines.—A proposal has recently been made in London to compel every vender of a patent medicine to declare the ingredients of which it is made before offering the same for sale.

Medical Society of New Jersey.—The next annual meeting of the Medical Society of New Jersey, will be held in Congress Hall, at Cape May City, on the 23d and 24th of May, 1876, commencing at 7.30 o'clock P.M. on Tuesday. Orders for excursion tickets over the Pennsylvania Railroad may be obtained on application to the Recording Secretary. Free passes will be given over the railroad from Camden to Cape May. The train will leave Camden at 3.30 o'clock P.M. on Tuesday.

Wm. Pierson, Jr.,
Recording Secretary.

Orange, April 29, 1876.

Weekly Bulletin of the Meetings of Medical Societies.

Monday, May 8.—N. Y. Ophthalmic Society; N. Y. Medico-Historical Society.

Tuesday, May 9.—East River Medical Association, Yorkville Medical Association.

Wednesday, May 10.—N. Y. Pathological Society.

Thursday, May 11—N. Y. Laryngological Society.

Friday, May 12.—N. Y. Medical Library Association.

Original Communications.

PHYSIOLOGY OF MICTURITION.

BY ALEX. W. STEIN, M.D.,

PROF. PHYSIOLOGY AND VISCERAL ANATOMY, NEW YORK COLLEGE OF DENTISTRY, ATTENDING SURGEON, VENEREAL DIVISION, TO CHARITY HOSPITAL, ETC.

We are still in need of considerable light as to the normal enervation of the bladder, and to the physiology of micturition. That the bladder is capable, on the one hand, of completely emptying itself, though it contains but a few drops; and on the other, that it will retain a large quantity of urine without overflow, indicates the admirable influence of its nerves in regulating its action; but it is difficult to account for the many physiological phenomena which this organ presents,—why, for example, a healthy man is often unable to pass water when required to do so in the presence of a stranger who watches him; or why the first attempts of a novice to make water while in a moving wagon is often attended with difficulty, while it is easy enough for one who is accustomed to it. Nor is it altogether easy to comprehend the diverse and often obscure nervous manifestations presented by the disordered bladder. Why some patients cannot approach a running stream of water without having an irresistible desire to micturate; or why—as in a case now under observation—the patient can allow the accumulation of a definite quantity of urine unconsciously, and then be driven suddenly and by an uncontrollable impulse to evacuate the same, often wetting himself before he can get ready to obey the command. Nor can we satisfactorily answer the many pathological conundrums which cases of incontinence of urine present.

The elucidation of the physiology of the bladder, upon the just appreciation of which the knowledge of its pathological manifestations depends, involves the consideration of two questions: 1st, the arrangement of its muscular fibres; and 2d, the derivation and distribution of its nerves. We must admit that the answers to these interrogations are not perfectly conclusive or satisfactory. Yet certain developments have been made in this direction which deserve more universal recognition; and to these I invite your consideration.

The muscular fibres of the bladder are more feebly developed than those of the hollow viscera generally, and are probably intermediate in strength to those of the stomach and œsophagus. The density and development of these fibres varies, however, in different individuals and in different states of the bladder. In the young, *ceteris paribus*, they are stronger than in the old, and in the female than in the male. In the contracted state of the bladder the fasciculi appear dense, while in the state of distention they are thin and separated according to the degree of distention.

In regard to the arrangement of these fibres, anatomists are at variance; and this statement is equivalent to the one that our knowledge upon this subject is still imperfect and unreliable. For, when men of equal ability, pursuing like investigations, and employing the same means, arrive at different results, it is fair to assume that we have yet to arrive at the absolute truth. To unravel the intricate arrangement of the muscular fibres of the bladder is an undertaking of difficulty; those who have undertaken this task are well prepared to make allowances for the discrepancy of authors upon this subject.

Without entering into a detailed analysis of the views of individual writers, we may state in general terms, that the muscular fibres are usually described as consisting of three sets; an external layer having a longitudinal direction, "Musculæ detrusor urinæ," an internal reticular and an intermediate circular or transverse stratum; the latter, according to some, being especially reinforced or developed at the neck. But the dissections given us by J. Bell Pettigrew, F.R.C.S., seem to show that this description, the one usually given, is not in strict accordance with the facts. According to this eminent authority, the muscular fibres of the bladder, with few exceptions, form figure-of-eight loops, the loops embracing the urachus and urethra respectively. His observations are based upon some sixty dissections, many of which have been photographed, and appear in his memoir on this subject. Some of these beautiful preparations I had the pleasure of examining in the Museum of the Royal College of Surgeons, London, where they are permanently mounted and preserved. Pettigrew recognizes the existence of seven sets of loops, three external, three internal, and a fourth an intermediate or central. The first and seventh strata (the most external and the most internal) pursue a vertical direction, and are feebly developed; the second and sixth run in a slightly oblique spiral direction, crossing at acute angles, after the manner of an attenuated figure-of-eight, and consist of stronger fibres; the third and fifth sets are still more developed, and run in a more oblique spiral direction than the latter, crossing at obtuse angles as in a figure-of-eight flattened from above or expanded laterally. The fibres of the fourth or central layer pursue a very oblique spiral course, and crossing at very obtuse angles, form figure-of-eight loops, so flattened as to have hitherto been mistaken for complete circular fibres. While speaking of the above fibres as consisting of layers, the term layer is used in a restricted sense, the fibres rarely occupying the same plane or run exactly parallel. They moreover split up and become fused with each other, with corresponding or homologous fibres, and with fibres which are either superimposed or underly them.

The existence of a true sphincter to the bladder has repeatedly been denied, probably because the fibres of which the sphincter is composed are not separate elements belonging exclusively to the neck, but are continuous with those encompassing the body of the bladder.

Sir H. Thompson says: "It is evident that both the circular and longitudinal muscular fibres at the situation just indicated (at the neck), exist in much larger quantities than in any other part of the bladder; but their arrangement is not sphincteric. They are no doubt chiefly concerned in the expulsive function of the bladder; and their aggregation here is the necessary result, as far as the longitudinal fibres are concerned, of their convergence to one point." Budge has also endeavored to show that the circular fibres at the orifice of the bladder do not possess the function usually ascribed to them, and attributes the sphincteric power wholly to the passive contraction of the constrictor urethræ and bulbo-cavernosus muscles. In support of this view, he affirms, that if a canula is inserted into the ureter, and a column of water sufficient to overcome the resistance of the sphincter is made to flow in an uninterrupted stream from the bladder, and while the flow is going on, different parts of the bladder and urethra are faradized, it will be found that, as soon as the electrodes are applied to the con-

strictor urethræ and bulbo-cavernosus muscles, or to the former alone, the flow is instantly checked. When the electrodes are directed to the prostatic portion of the urethra, a similar, though more feeble result obtains; and this action becomes less intense the nearer the stimulation is applied to the bladder, while any part of the viscus itself may be excited, even its neck, without causing an interruption in the current, but rather an increase in the flow. With all respect to the eminent authority quoted, it seems to me that this experiment, apparently so conclusive, is not free from several objections. That the striated constrictor urethræ and bulbo-cavernosus muscles, when excited, exert a greater power of resistance to the evacuation of the bladder than do the more feeble involuntary fibres surrounding the neck and prostatic urethra, is a fact, which common observation may teach, but which thus demonstrated by experiment, still fails to prove that these muscles are the only, or indeed the essential factors in the sphincteric action. That faradization at the neck, *behind the prostate*, should have increased rather than interrupted the flow from the bladder, is a result which may be accounted for in the fact that the fibres of the bladder are common to both the neck and body of the organ; and it is not difficult to understand how artifical stimulation applied *behind the prostate*, and therefore beyond the actual seat of the sphincter, should so induce the vermicular contraction of the rest of the organ as to produce an expulsive effort. The continuity of the fibres of the neck, with those of the body, which is apparent in the preparations of Pettigrew, does not, in any way, militate against the possibility of a separate sphincter power of the fibres surrounding the neck; for, as he justly says, as well might we argue against the existence of a sphincter in the stomach or rectum, where, as is well known, there is continuity of structure. That portion of the figure-of-eight loops which embraces the urethra constitute the vesical sphincter. The fourth, or central layer of very oblique fibres, which embrace the lower two-thirds of the bladder, and upper portion of the cervix posteriorly, enter principally into the formation of the sphincter, which, together with the oblique fibres, constitute a well-developed anterior and posterior lip, while the less-developed, slightly oblique, and longitudinal set of fibres form the right and left lateral lip of the sphincter.

In reviewing this subject, we must not ignore the part which may be taken by the prostate in this function. As but a small portion of this organ is glandular, the propriety of calling this body a gland may be questioned; the secreting follicles which make up one-fourth, or possibly one-third of its mass, are, as the other glands of the urethra, but appendages of the mucous membrane, extending into the surrounding tissue. This organ is, in truth, essentially an involuntary muscle surrounding the intra-pelvic portion of the urethra, consisting of circularly or spirally arranged fibres, which are continuous with those of the bladder behind. Pettigrew says: "The external or longitudinal, slightly oblique, oblique, and very oblique spiral fibres, which form the three outer, and the central or circular tunic of the bladder and urethra, are curiously enough repeated in the prostate of the male, and the analogous structure in the female; so that this gland would seem to be composed chiefly of fibrous offsets from the longitudinal, slightly oblique, oblique, and very oblique, or circular fibres in question."

While the muscular element of the prostate possesses the undoubted function of pressing the seminal fluid into the grasp of the constrictor urethræ and ejaculator semines, does it not possess, independently of this, the other function of maintaining the closure of the vesical orifice? This view would be supported by the fact, that in the female there is a corresponding development of muscular fibres surrounding the intra-pelvic portion of the urethra. Profs. Ellis, Guthrie, Leuckhart, Virchow, and others, have distinctly recognized a rudimentary prostate in the female. Indeed, this portion of the male canal differs from that of the female only in the greater development of its muscular fibres, in connection with a special function, and in being provided with a special set of secreting glands.

Appreciating the influence exercised by the intrinsic involuntary muscular fibres which surround the vesical orifice and intra-pelvic urethra, we must give due importance to the action of the extrinsic voluntary constrictor urethræ, bulbo-cavernosus and levatores prostatæ muscles, whose natural tonicity tend, during the intervals of micturition, to approximate closely the urethral walls; and which, under the influence of volition, relax or contract, as may be necessary, for the retention, or complete expulsion of urine. The action of the levator prostatæ is especially interesting in connection with the physiology of micturition, constituting, as it does, an important factor in maintaining the closure of the vesical orifice. This muscle, descending from its origin near the pubic symphisis, passes beneath the prostate and neck of the bladder, and unites with its fellow of the opposite side, in the central point of the perineum. These fibres support the prostate and neck of the bladder as in a muscular sling, and in virtue of their tonicity, maintain the uvula against the walls of the vesical orifice. Looking through an opening made in the upper part of the bladder, a slight elevation—the uvula—will usually be seen at the apex of the trigone, projecting, as it were, into the orifice of the urethra. To this elevation has been ascribed the important function of completely closing the urethral orifice.

But we must not forget that the occasional absence of the uvula is not attended with any impairment in the integrity of the vesical orifice; while on the other hand, the uvula is not the only elevation found in this vicinity; on the contrary, there are, as first shown by Barkow, of Breslau, generally five small eminences at this point—three posterior and two anterior to the vesical orifice. Occasionally they are all absent, or else they are unequally developed in different subjects, now one and then another being most prominent. The influence of the levator prostatæ as a sphincter to the bladder, is distinctly felt, when the levator ani (of which the levator prostatæ is a part) is brought into action in the expulsive effort of defecation. While this muscle acts in raising the rectum in the expulsion of the fæces, its anterior portion—the levator prostatæ—contracts simultaneously around the neck of the bladder in a sphincter-like manner; so that, if the flow of urine has commenced, it becomes arrested with the expulsive effort of defecation. The simultaneous expulsion of fæces and urine becomes therefore an impossibility.

The tonicity or passive contraction of voluntary sphincters depends, as is well known, upon their nervous connection with the spinal cord, but it remains to be demonstrated that the involuntary sphincters do not in part derive their tonicity from the same source. In the instance of the vesical sphincter it has been shown that, after section of the cord at a certain point, the tone of the sphincter is lost; the pressure necessary to overcome its resistance being no greater than that required in the dead animal. According to Kupressow, a column of water, sixteen to twenty inches in height, is required to overcome the resistance of

the sphincter in the rabbit, which, after section of the cord, falls to five or six inches. Giannuzzi and Naurocki found that in a bitch, a column of water, thirty inches in height, was required; which pressure, after section of the vesical nerves, fell to eight inches, and was no less after death.

But, while the outlet of the bladder is thus placed under the excito-motor influence of the cord, the act of micturition can be promoted or restrained by voluntary effort. This is manifest in the ordinary act of micturition, the first step of which requires a *voluntary* relaxation of the muscles about the vesical orifice. While on the other hand, we are capable of suddenly arresting the flow of urine before complete evacuation has taken place, should occasion require us to do so. Again, we know, to our discomfort, that circumstances oblige us sometimes to defer the act of micturition, though the bladder may be in a state of over-distention.

Up to a certain point of distention, the tone of the sphincter suffices to counteract the expulsive force of the detrusor, without the intervention of conciousness or will; but when this degree of distention is exceeded, or the stimulating quality of the urine is through some cause increased, we are capable, and indeed are sometimes obliged, to reinforce the excito-motor reflexion by voluntary effort.

Appreciating the function of the perineal muscles, we find that the act of micturition requires the simultaneous activity of two forces. First, a complete relaxation of the above-mentioned muscles; and secondly, a contraction of the vesical walls, supplemented to a greater or lesser degree by the expulsive power of the diaphragm and abdominal muscles. The first action is effected in obedience to the will; the second, involuntarily, unless the diaphragm and abdominal muscles are brought into requisition in the expulsive effort. When the bladder is in a moderate state of distention, the sphincter and urethral muscles being relaxed—we believe, contrary to the views sometimes expressed, that the inherent power of the bladder is sufficient to empty its contents, independent of any extra vesical force; but if the stimulus to the so-called detrusor is insufficient to overcome the reflex contraction of the sphincter, as when there is but a small quantity of urine in the bladder, and we desire to evacuate the same without a natural call to do so, the abdominal muscles and diaphragm are brought into requisition as voluntary auxiliaries; or, when the bladder has been in a state of distention, and its walls have become stretched, it again requires the co-operation of the abdominal muscles and diaphragm to expel its contents. In the forcible expulsion of urine, the abdominal muscles act as they do in forcible expiration, but the ascent of the diaphragm being prevented by the expansion of the lungs, the force is exerted upon the contents of the abdominal cavity, and the sphincters of the œsophagus and rectum being closed, the viscera press downwards upon the bladder, expelling its contents.

There are two kinds of nerves which preside over the functions of the bladder: those which act independently of the will, but under its control, viz. the sacral plexus of the cerebro spinal system; and those which are not only independent of, but beyond, the influence of volition, viz. the hypogastric plexus of the sympathetic system. The former are traced more directly to the neck and base of the bladder; the latter distributed chiefly to its sides and upper part.

That the spinal cord is not a single nervous centre, but rather a series of centres united in a continuous column, is a statement reconcilable with what is known concerning the physiology of the cord. The researches of Budge, Kupressow, and others—experimenting independently upon rabbits, dogs, etc., demonstrate the existence of a well-defined genito-spinal centre for the bladder, and limit the same—the former to a region corresponding to the fourth, the latter to between the fifth and sixth lumbar vertebræ. Section of the cord at these points always destroys the reflectory tone of the sphincters, causing incontinence of urine, while section above the fourth lumbar vertebræ has no such effect. Budge has also shown that, besides this excito-motor centre, there is a higher regulating ganglion for the bladder, situated along the peduncles of the cerebrum and restiform bodies. Faradizing different parts of the encephalon he found these the only portions of the brain which responded to the physiological effects of electrical stimulation in exciting visible movements in the viscus. The nerves originating from these parts pass along the anterior column of the cord, and emerge with the third, fourth, and fifth sacral nerves. Some of these nerves animate the levator prostatæ, constrictor urethræ and bulbo-cavernosus, while other portions of the same proceed with the sympathetic filaments to the prostate and vesical sphincter. It is also necessary to assume that a large proportion of cerebro-spinal filaments communicate and intermingle with sympathetic nerves, to be distributed solely to the body of the organ.

When there is but a small quantity of urine in the bladder, the sensory impression communicated to the spinal cord is reflected by motor impulse to the sphincter, whose energy increases with the accumulation of urine; but, when the bladder becomes distended, or the stimulating quality of the urine is from some cause increased, the impression is no longer simply reflected from the spinal cord, but transmitted to the sensorium, where it gives rise to uneasiness or pain, and from whence is reflected that impulse which endows us with the power of voluntary retention or emission of urine. In all cases, the impression made must be powerful enough to reach the seat of common sensation; for the sympathetic is itself insensible, and its sensibility of parts supplied by it depends upon the intimate connection with the cerebro-spinal centre. Whether such impression is conducted directly from the sympathetic nerve to the cerebro-spinal centre; or whether it is first conducted to the sympathetic ganglia and thence by fibres originating in the gangliomic cells, is quite uncertain. If the former be true, the reason why the presence of a small quantity of urine does not produce an impression, may be because the number of cerebro-spinal filaments in sympathetic nerves are so few; if the latter view be correct, our insensibility to the small quantity of urine must depend on the diffusion or exhaustion of the sensory impression at the ganglion. It is generally believed that, although the sympathetic system is never the path of the voluntary motorial impulse, the influence which it exerts on the movements of parts to which it is distributed, is in great part derived from the cerebro-spinal centre, for experimentation shows that movements similar to those having their origin in the sympathetic ganglia may be produced by irritating those spinal nerves with which the sympathetic nerves supplying any given part are connected. It has also been shown that stimulation of certain parts of the brain excites movements in organs of vegetative life. We may infer, then, that if we are unconscious of movements in the body of the bladder, because so largely provided with sympathetic fibres, the spinal nerves connected therewith have nevertheless a prominent share in the movements produced. We have but to recall the

effects produced upon the bladder and other viscera by certain ideas—simple or emotional—to appreciate how closely these two great nerve-centres are associated.

In arresting the flow of urine during its passage along the urethra, we realize that the muscles surrounding the canal respond, in this respect, to the mandates of the will as promptly and as effectually as do other voluntary muscles; but when we desire to empty the bladder we become conscious of the occurrence of a distinct interval between the transmission of the volitional impulse and the flow of urine, especially is this felt when we hurriedly attempt to empty a full bladder. This is but one of the phenomena which constantly present themselves in evidence of the highly complicated manner in which the bladder fulfils its function, and which justifies the inference that there exists for this organ, in addition to the nervous centres mentioned, a special ganglion, which operates in regulating, restraining, or co-ordinating its movements. Such an inhibitory centre has been distinctly recognized; and the experiments of Goltz on dogs seems to locate it in the spinal cord, and as low down as the lumbar region.

Whatever influence this ganglion may have in bringing about an orderly sequence in the physiology of micturition, we must bear in mind, relative to the contraction of the bladder, that the cerebro-spinal nerves connected with sympathetic ganglia do not so rapidly transmit nerve force as when they have no such relation to the ganglion. And, therefore, the occurrence of the interval mentioned is perhaps not so much due to the tardy relaxation of the urethral muscles as to the sluggish action of the vesical nerves upon the walls of the bladder.

But while we are at present disposed to attribute so much of the influence of the sympathetic to its connection with the cerebro-spinal centre, we must not under-estimate its independent action upon the bladder until we know more of the physiology of the sympathetic as a whole. The presence of sympathetic ganglia in the walls of the bladder (as in other hollow viscera) is an interesting anatomical fact; and although these ganglia have hitherto been shown to have a special relation to the vascular supply, a more intimate knowledge of them may reveal important evidence bearing on the movements of the organ. Among those who have pointed out the existence of numerous sympathetic ganglia in the bladder of different animals and man, are the names of Remak, Beale, Hess, Meissner, A. Henocque, Klein, and Francis Darwin. The latter has contributed an able article upon this subject in the *London Quarterly Journal of Microscopical Science*, April, 1874.

CASE OF HYSTERIA IN A LYING-IN WOMAN, SIMULATING PULMONARY EMBOLISM.

By FRANK P. FOSTER, M.D.,

NEW YORK.

Grave lesions occurring during the puerperal period have in several instances been mistaken for hysteria. Dr. R. M. West* records a "case of sudden apoplectiform seizure, terminating fatally in thirty-six hours, on the sixth day of lying-in," in which the symptoms were at first attributed to hysteria, but in which the autopsy showed the presence of brain-lesions. Dr. Barker† gives a case of puerperal embolism of the posterior tibial, in which a surgeon, who saw the patient in consultation, was disposed to regard the phenomena as due to hysteria. In the following case, the symptoms seemed to me at first to point to the occurrence of pulmonary embolism, but they were soon found to be caused by hysteria.

Mrs. D., 25 years old, rather tall and slender, somewhat anæmic, and, as subsequently ascertained, of neurotic tendency, was delivered of her first child August 22, 1875, by a short and easy labor, concerning which there was nothing noteworthy except that there was a placenta succenturiata. For the first nine days after delivery her condition was in every respect satisfactory. The temperature in the axilla was at no time above 99.5° F. She ate and slept well, and appeared cheerful and free from discomforts, but on one or two occasions I fancied, from the expression of her face, that she was making an effort to control a tendency to some emotional outbreak. During these nine days there was some diminution in the frequency of urination, and some hesitancy in the act. She would hold her water until the desire to pass it became urgent, when she would feel an impediment for a minute or so, after which the flow would become free and full.

August 31.—I was hastily called to see her about midday. Her condition had continued favorable up to 11.30 A.M., at which time a vaginal injection was given, she herself holding the nozzle of the syringe. While taking the injection she suddenly felt a sensation as if the point of the syringe had come in contact with some sensitive part, and, instantly, pain, with a feeling of indescribable distress, spread over the greater portion of her body—now involving one part and now another. There was a sense of prostration and of impending suffocation. There was a marked chill, but it was brief and not severe. The lips were cyanosed. The lower limbs, up to the middle of the thighs, were quite cold. A slight discharge of blood took place from the vagina. Some of these facts I learned on my arrival, and others of them subsequently. I found her in a state of great anxiety, although evidently trying to control her apprehensions. She lay propped up in bed, with a number of pillows under her head and shoulders, and on any attempt being made to lower her head she complained of increased suffering. There was no true dyspnœa at that time, although the movements of the chest wall were painful, as were also those of any part of her person. That she had suffered, however, from a suffocative sensation (as distinguished from mere painful breathing) I satisfied myself by repeated cross-questioning. Her lips were still noticeably cyanosed, but I was assured that the discoloration had previously been much more decided. Her face wore the expression of great fright. The pulse was 140, and the respiration 32. The pupils were moderately dilated. The general surface was decidedly warm and perspiring copiously. Palpation of the abdomen revealed nothing abnormal, except that the stomach was rather distended with gas. The breathing was thoracic and, but for its rapidity, in every way normal. On auscultation, nothing unnatural was detected either in the lungs or in the heart. The pulse was not specially weakened. No urine had been passed since early in the morning, and there was no repletion of the bladder. The bowels had been moved by an enema the previous evening.

The only subjective symptom now was pain—constant, but varying in severity, and with surprising rapidity, in situation. It had invaded all parts of her body in turn, but was now chiefly referred to the hypochondriac regions. She would suddenly exclaim

* Trans. Obs. Soc. of London, vol. ii., 1860, p. 276.
† The Puerperal Diseases. New York, 1874, p. 259.

that she was suffering severe pain at the lower portion of the right side of the chest, and then in a few minutes she would tell me that the pain had entirely ceased in that situation, and shifted to the opposite side, and so on, in like manner, with other parts of the body; the pain flying from one arm to the other, from the right to the left side of the neck, etc. When the pain affected either arm (which did not occur during my presence) she was unable for the time being to use the affected limb; but whether this was owing to actual or supposed loss of power, or to mere dread of increasing the pain, I could not ascertain.

In view of the more striking of the foregoing facts, my first impression was that I had to deal with a case of embolism of the pulmonary artery. I soon succeeded in quieting the patient's fears, and gave her ten minims of tincture of digitalis, with a teaspoonful of brandy in a little hot water. The nurse had already given her brandy twice (about a fluid ounce in all), had rubbed her limbs, and had applied sinapisms to the chest, abdomen, and limbs. Her distress was soon mitigated, but she was still unwilling to have her head lowered, and from time to time fresh attacks of pain took place in various parts about the chest and neck. At the end of an hour her pulse had fallen to 128; the cyanosis had disappeared, and there had been no recurrence of dyspnœa. Meanwhile, the erratic character of the pain had led me to think that the case might, after all, be a mere hysterical paroxysm, and I expressed that opinion to the patient's mother. I now left her, after giving her another draught containing ten minims of tincture of digitalis and four minims of Magendie's solution, and directing the nurse to give another similar draught, with brandy, in case of a return of dyspnœa.

I saw her again at 4 P.M., when the pulse had again risen to 140; the breathing remained at 32, and the temperature in the axilla was 101·7° F. A fresh access of pain, without dyspnœa, had occurred at 3 o'clock, and the nurse had given the draught, which was soon followed by a mitigation of the pain. She was now as comfortable as when I had left her, but perspiring freely and feeling rather thirsty. There was some twitching of the facial muscles. I directed the bed coverings to be made lighter, and allowed her to drink sparingly of lemonade. Ordered

℞ Sol. morphiæ sulph. (Magendie)... ♏xxiv.
Tinct. digitalis..... ♏xxx.
Aquæ..... ʒi.
M. S. A teaspoonful every second hour.

Directed the nurse to save any urine which the patient might pass.

I was still of the opinion that the case was an hysterical paroxysm, but, reflecting that in several instances embolism had been mistaken for hysteria, and that, in genuine cases of pulmonary embolism, a temporary mitigation of the urgent symptoms had sometimes been noticed, and not having been able at that time to get a frank history of the patient's hysterical antecedents, I asked for a consultation, and it was arranged that my friend Dr. Weir should be asked to see the case with me in the evening.

Dr. Weir saw her with me at 9 P.M. She had taken two doses of the morphine and digitalis mixture, and was feeling decidedly more comfortable, being now able to lie at full length. The copious sweating was very much moderated. She was still rather thirsty, and had no desire for food, having taken none since her breakfast except a cup of beef-tea in the evening. Her pulse was 120, and the temperature in the axilla 100,3° F. The muscular twitching had subsided. She had felt inclined to sleep at times, but had resisted the inclination from the fear, as she said, that during sleep a recurrence of the symptoms might take place. A thorough examination of the chest and abdomen by Dr. Weir revealed nothing abnormal. During our visit she voided rather more than a pint of urine, of normal appearance, which, on examination with heat and nitric acid, showed no albumen, or, at all events, only such a mere trace as might well have been occasioned by a slight admixture of the vaginal discharge. The secretion of milk remained unaffected.

Dr. Weir made an unobserved diagnosis of hysteria, and recommended a cathartic, advising also that she should soon be allowed to sit up. Ordered two compound rhubarb pills, followed in the morning by a third, if necessary; ten grains of bromide of potassium to be given in case of fresh outbreak of pain, etc. Beef-tea to be given occasionally.

September 1, 9 A.M.—Pulse 88, resp. 16, temp. in axilla 99° F. Has had a comfortable night, with a fair amount of sleep. The breasts have been drawn once (the child being fed with cow's milk, to avoid its being affected by the digitalis). The three pills have had no effect. To take two tablespoonfuls of mist. rhei et sodæ every third hour until the bowels move, child to be put to the breast again, omit vaginal injections. During my visit the patient's mother had a well-marked hysterical convulsion, and I then learned that both she and her daughter had frequently suffered from hysteria.

8 P.M.—Pulse 80, temp. in axilla 98.6° F. Patient feeling better, one free movement of the bowels has occurred; still little or no appetite.

September 2.—As she had a restless and uncomfortable night, with sensations of faintness and a return of the pain in the chest and neck, I was called to see her early this morning. On my arrival she had been got on to a lounge, and had asked to be taken into her drawing-room, a proceeding which, with my decided approval, was at once carried out. I directed eight grains of quinine to be given at once.

She took some solid food during the day, and in the evening I found her in an arm-chair, feeling, to use her own words, "wonderfully better." Her recovery was uninterrupted from this time on.

THE TREATMENT OF DIPHTHERIA BY INJECTIONS PER RECTUM.

By W. H. VAIL, M.D.,

CORNWALL-ON-HUDSON.

Mrs. G——, having lost a young son in New Jersey last October, with renal dropsy, the sequel of an attack of diphtheria, came here in December to visit her sister, bringing a fur cap which her little boy had worn during his sickness. This cap her sister's little daughter M——, aged one year and ten months, wore the day before Christmas. Between Christmas and New Year's M—— was dull and listless, though not sick abed. January 3d I was called in, and pronounced it a case of diphtheria. A day or two after, Mrs. C—— called and spent some time in the sick-room, contrary to my instructions. The next week her little girl had diphtheria, and died.

It is to the treatment of M——, the medium between the other two cases, and the only one which it fell to my lot to have the charge of, that I wish to call the attention of the profession. On Monday, January 3d, recognizing the symptoms as those of true malignant diphtheria, though as yet no membrane was

visible in the fauces, I immediately began to consider, in the first place, the best means of maintaining our little patient's strength: and next, if possible, to limit the spreading of the membrane. To maintain the strength I prescribed cinco-quinine, iron, cream and milk. To limit the spreading of the membrane, potas. chlor., and salicylic acid internally; steam and carbolic acid in the atmosphere of the apartment. But, alas! when I called Monday evening the membrane was visible in the fauces; and that trouble so very common in this class of cases, utter repugnance to swallow anything, was present. Immediately deciding that it was worse than useless to attempt to maintain her strength and combat the ravages of the disease by forcing down food and medicine, through the whole course of the attack, I turned my attention to the absorbing power of the rectum. I ordered the following injection to be given every six hours:

℞	Cinco-quin.	gr. iij.
	Potass. chloratis (sat. sol.)	ʒ ij.
	Acid. salicylic.	gr. iv.
	Tr. ferri chlor.	ʒ ss.
	Vini gallici	ʒ ij.
	Cream	ʒ ij.
	M.	

No medicine or food was attempted by the mouth, except keeping the tongue moist with cream, milk, ice, or ice-cream. The above injection was repeated every six hours till Tuesday evening, when, as her strength was rapidly failing, I increased the quantity of brandy to ʒ ss. in each injection, and ordered the enema repeated every four hours.

For five days and six nights, this little patient took every four hours, by enema, the following—

℞	Cinco. quin.	gr. iij.
	Pot. chlor. (sat. sol.)	ʒ ij.
	Acid. salicylic.	gr. iv.
	Tr. ferri chlor.	ʒ ss.
	Vini gallici	ʒ ss.
	Cream	ʒ ij.
	M.	

The only variations in the composition of the injections being, that after a day or so, an ounce of beef-tea was substituted for one of the cream; twice, the quantity of brandy was reduced one-half—but each time the failing pulse and weakness showed very plainly the need of more stimulus, and we were compelled to return to the usual quantity of half an ounce in each injection. During two or three nights, when the jactitation was extreme, it being difficult to keep her on the bed, ten drops of laudanum were added to each enema with the happiest effect. The same amount of laudanum was added whenever the bowels rejected an injection; for whenever this occurred, another was given immediately, and in no instance was the second rejected. Nothing surprised me more in the history of this case than the retentive and absorptive powers of the rectum. Twice only did we add the laudanum to prevent the rejection of the enema, and the quieting, tonic, and stimulating effects of an injection were plainly visible in less than an hour after its administration. The bowels moved quite regularly every other day, and although the movements generally occurred about two hours after an enema had been administered, nothing resembling an injection appeared in the fæces. On the contrary, the fæces were well formed and natural. After the first week, as the acute symptoms subsided, the injections were continued at intervals of six hours, the brandy at first being lessened one-half and soon discontinued: but the other constituents were continued in the same proportions for a fortnight longer, for it was not till then that the stomach would retain and digest food. As to the extent of surface invaded by the membrane, it completely covered the mouth, even to the lips, coating the fauces, and so blocking up the posterior nares that for four or five days the little sufferer was compelled to breathe wholly by the mouth. The stomach and small intestines were evidently partially or wholly coated, as she vomited patches of the membrane for a week after the subsidence of the acute symptoms, and patches were seen in the fæces for a fortnight more.

Fortunately the false membrane did not invade the air-passages. I think that in loading the air with steam and carbolic-acid vapor, and giving internally salicylic acid and chlorate of potash, we have the best remedies for limiting the extent of the membrane. The amount of medicine in each enema, especially of iron, may seem very large for a child so young; but after watching very closely the effect of each dose, I was assured not only that they did not harm the little one, but, on the other hand, that nothing less would keep her from sinking. Nothing but these heroic doses saved her from being destroyed by the poison of this, the most debilitating of diseases. As to these large doses of iron, I may say just here, that I have now under treatment a confirmed tubercular patient, who has a large cavity in his right lung—but who has gradually worked his way up from fifteen drops to fifty drops, three times a day, of muriated tincture of iron, and is steadily improving.

I have reported thus at length the treatment of this case of diphtheria, because it seemed very important to me, and I want my brethren in the profession to give this new method a trial. It may happen that in the next case the bowels will not act so kindly. This way of treating the disease has at least the merit of being painless. If there is any way of managing diphtheria and croup without caustics, which promises equally good results, let us hail it with joy. I have only the one case to report. I am glad I had no others of that disease to treat; mine is not the disposition to long for such cases, but I shall wait anxiously for reports from others as to the efficacy of this plan.

Progress of Medical Science.

Tænia and Raw Meat.—For some years past, the frequency of tænia, especially in children, has been assuming such unusual proportions in France, that it has attracted the especial attention of medical men. There was a rapid increase in the frequency of tænia in Paris during the year 1870, an increase due to the unaccustomed alimentation enforced by the siege of Paris. The frequency of tænia has not increased in that part of the army residing in France, as it has in the civil population; while among those stationed in Asia and Africa, particularly in Syria, Algeria, and Senegal, tænia is of frequent occurrence. The cause of this increasing appearance of the parasite in the civil population is to be found in the widely extended use of raw meat as a medicament, and of insufficiently cooked meat as food. The uniform alimentary régime of the soldiers explains the persisting rarity of tænia in the army in France, while in Algeria, etc., in consequence of the want of public hygiene, the bodies and débris of animals are often left exposed to the air, and the water used as drink becomes charged with eggs

or débris containing cysticerci. The prevalence of tænia in Abyssinia is due to the practice of eating the raw flesh of the sacrifices while it is still warm and palpitating. Formerly in St. Petersburg the Bothriocephalus alone was met with, but since the introduction of the use of raw meat in the treatment of the diarrhœa of children, cases of tænia in these children have been observed. Numerous isolated cases, moreover, have been reported, which show undoubtedly the dependence of tænia on the use of raw meat.

Tænia larvæ may also be ingested alive in underdone meat. M. Vallin has proved experimentally that the temperature of roast meat, as it is usually served, varies between 148° to 151° F., at the periphery, and 135° to 140° at the centre, and that the latter temperature is not sufficient to destroy the larvæ. He has proved that a temperature above 153° F. is necessary to destroy trichinæ.

Observation has also shown that it is the tænia mediocanellata which proceeds from the cysticercus of beef, while the armed T. solium is developed from the cysticercus of pork. The third variety of cestoid to which man is subject, the bothriocephalus latus, seems to be developed directly from the egg, and is propagated by the use of water vitiated by the excrement of men or animals.

The prophylaxis of tænia consists simply in subjecting beef and pork to a sufficiently high temperature in the process of cooking, or, as has been proposed by M. Roger, in the substitution of raw mutton for raw beef. The cœnurus, the only cestoid larva met with in sheep, is found exclusively in the brain, and accomplishes the second stage of its development in the intestine of the dog, but not of man. Finally, in each particular case, the advantages to be derived from the use of raw meat must be weighed against the inconsiderable dangers dependent on the development of tænia.—*Gazette Médicale de Paris*, March 11.

Palmar Bursal Tumors and the Bodies in Them.—In the course of a clinical lecture on this subject, M. Duplay referred to the difficulty of diagnosticating these tumors from the so-called crepitant lipomata, which are not so very rare. In the latter the fluctuation is obscure, and the sensation of crepitation not exactly the same as that furnished by the hordeiform cysts. These cysts are most frequently met with among mechanics, and are due to the constant pressure of the tools on the palmar tendons, the consequent irritation of their serous walls resulting in a subacute inflammatory affection. Under the influence of this irritation, a proliferation of the constituent elements of the serous walls takes place in spots, forming enlargements which project into the synovial cavity and raise the epithelium. Later they become pedunculated, and are finally separated. On the cadaver this process has been studied in its different periods of evolution, and the hordeiform bodies have been found to consist of exactly the same elements as the sub-serous bodies that preceded them. Their structure is very elementary; it consists of an amorphous or imperfectly fibrillated tissue, often softened, and containing sometimes granulations and the rudiments of a cellular formation. M. Duplay advises caution in making a prognosis, for these cysts sometimes suppurate and lead to phlegmonous inflammation, and sometimes excite a fungous synovitis, which is liable to extend to the neighboring articulations, and may then necessitate amputation. He advises abstention from all active treatment, where it is possible, for even if an operation prove successful, it leads to a complete adhesion of the serous surfaces, that interferes even more than the swelling with the movements of the fingers; while, on the other hand, the development of fungosities or of a diffuse phlegmon are to be feared. If an operation be imperative, however, the choice lies between puncture and incision, with or without injection of iodine. Subcutaneous incision is advisable on account of the difficulty of emptying the sac. If an incision be made at all, it should be free enough to evacuate the cyst readily, which may then be closed with gold-beaters' skin, compression applied, while absolute immobility of the limb is maintained.—*La Tribune Médicale*, March 19th, 1876.

Gastro-Enterotomy, with formation of an Artificial Anus in the small Intestine.—At a meeting of the Clinical Society of London, Mr. Maunder read a paper on this subject. The subject of the paper was a man sixty-eight years of age, who had been suffering a long time from constipation. Six weeks before his last attack he had passed blood per anum. The constipation was relieved at first by aperients, but subquently they had no effect. The abdomen was hard and tympanitic, and a globular swelling was felt a little below the umbilicus, toward the right side. Two days after the attack commenced, a large enema of five pints of warm water failed to give any relief, and it was inferred that the large intestine was empty, the conclusion being that the small intestine was obstructed near its entrance to the cæcum. Hiccough set in, and on the following day the small intestines were distended, their outlines being visible. These were then tapped with a small trocar and canula. Three days elapsed, and the symptoms were somewhat improved, though the vomiting was constant. Mr. Maunder then anæsthetized the patient, and did the following operation. An incision, about one and one-half inches long, was made extending between the umbilicus and the right anterior spine of ilium, the skin, fasciæ, muscles, and peritoneum being divided for half the length of the wound; the bowel was thus brought into view, though it did not protrude. It was then opened slightly, so as to permit the escape of gas; having been seized before it could disappear in the peritoneal cavity, and drawn forward into the wound, thus closing the abdominal opening. After opening the bowel, a fine fishing-gut suture and then silver-wire sutures were introduced, the latter to make six sutures. The bowel was then opened, so that the index finger might be introduced, when a large amount of gas and rusty, semi-solid faces escaped. Two weeks afterward, the patient was able to go about his room. Three months later, Mr. Brown, who was then attending him, stated that the patient was improved in health, and that he could walk a good distance every day. The patient gave himself an injection of warm water daily, through the opening, this being his only way to secure a movement. Mr. Maunder thinks there are several points essential to the success of this operation; viz., that the general contents of the abdomen should not be interfered with at all; the abdominal incisions should not be unnecessarily large, and the opening made in the bowel should be simply sufficient to prevent anything from entering or escaping from the peritoneal cavity, and this is accomplished by plugging the opening with the bowel. In the after-remarks, Mr. Thomas Smith related a similar operation which he had performed, in which he succeeded in opening the bowel, though too late to save the patient's life.—*The Lancet*, March 18, 1876.

The Pneumograph in Tetanus.—M. Richet thinks that the pneumograph will be of great use in determining the prognosis and proper treatment of tetanus. He

employed it recently in a case of this affection consecutive to gangrene of the feet following frost-bite. The disease proved fatal by asphyxia in sixteen hours. The respiratory tracings showed, at intervals, an interruption in expiration, a sort of expiratory spasm, due partly probably to spasm of the glottis, and partly to spasm of the abdominal expiratory muscles. In another case, the tetanic pause occurred during inspiration. In this case the symptoms lasted three days, and the patient died in a sort of comatose condition, but not asphyxiated. The tracings in this latter case were exactly similar to those obtained from a frog poisoned with strychnine, or excited by the induced current. Now, when the spasm is due to the inspiratory muscles, tracheotomy is useless, and a cure may be hoped for, because the hematosis will always be sufficient to permit the absorption of therapeutic agents, and give them time to subdue the medullary irritation. When, on the other hand, the spasm is expiratory, the hematosis, at a given moment, will be interrupted, and asphyxia be imminent. In such a case as this tracheotomy is indicated, and, in fact, this operation has succeeded in saving life in several cases of tetanus.—*Gazette Médicale de Paris*, April 1.

Dislocations of the Thigh, treated by Reid's Method.—Dr. R. O. Cowling reports six cases of dislocation of the thigh, treated by this method. Two of the patients were the oldest and youngest on record, the former being four months and the latter ninety years old. In the case of the child a thyroid dislocation was discovered, and the limb was restored to its shape and mobility by one revolution of the limb. The case ninety years of age had an iliac dislocation, which failed to be reduced after several revolutions of the limb had been made. The patient was suffering from several injuries, besides which fresh contusions appeared about the hips, the result of the manipulations; so, further attempts at reduction were not attempted. The patient died at the end of five weeks, and no post-mortem was obtained. Dr. C. thinks that Reid's method is as powerful a force as that of extension and counter-extension. In manipulating, fractures may occur from bringing down the limb too violently. He thinks that, to avoid any accident, it is best to be careful whenever the bone "hitches." As a preventive of abscesses after reduction, he advises the plastic apparatus, of plaster-of-Paris, starch, etc.—*The American Practitioner*, April, 1876.

The Anatomical Structure of the Soft and Hard Chancres.—Dr. J. Caspary, of Königsberg, expresses the opinion that the essential difference in the structure of the hard and soft chancres consists in a new formation of connective tissue in the former, while it never reaches the same development in the latter, because of the constant destruction of tissue which goes on. In recent indurations this new formation is seen in the dense, thick network which everywhere surrounds the cells, while in those of longer standing, bundles of fibres run between the newly formed cells. He regards the narrowing of the vessels which he observed in the older cases as the result and not the cause of the sclerosis. He believes that the formation of these fibres proceeds from the infiltration cells, and not from a growth inwards of the peripheral young connective tissue. This latter he believes to be in the nature of a capsule, due to inflammatory action.—*Vierteljahrsschr. f. Derm. u. Syph. III.*, 1, 1876.

Fractures of the Costal Cartilages.—Dr. E. N. Bennett gives some very interesting facts relative to this class of fractures. Under the microscope he has examined the cartilages, and thinks that a great deal may be learned in that way as to the predisposing causes of these fractures. He draws the following conclusions from his study of the subject. 1. That fractures of the costal cartilages may be arranged in three groups, the first containing recent fractures, which are consequences of grave injuries of the chest, and mere results of the fractures of the sternum or ribs; the second, united fractures caused by limited direct violence; the third, fractures the result of muscular action. 2. That degeneration of the cartilages, which precedes their ossification—the cleavage of the hyaline substance—may be regarded not only as a cause predisposing to fracture, but also as a cause determining its direction, which in the great majority of cases is transverse. 3. That oblique fractures are possible chiefly as secondary injuries. 4. That the callus in these fractures is developed as in bone, the broken cartilage participating in its development. 5. That the difference between the modes of union in bone and cartilage fractures consists, in the case of overlapping fractures, in the more limited development of callus in the cartilage fractures, and in all forms of fracture in the slowness with which the process of union would appear to be completed.—*The Dublin Journal of Science*, March, 1876.

Resection of Shaft of Tibia, leaving Periosteum. Reproduction of Bone.—Two operations of this description were performed by Prof. Spence at the Edinburgh Royal Infirmary. The first case was of a boy ten years old, who had acute necrosis of the shaft of the tibia. Prof. S. separated the periosteum all round the bone, with the periosteum scraper, and removed the entire shaft, after resection above and below. The wound was stuffed with lint soaked in carbolized oil. A posterior splint was applied and the limb slung. In two months new bone was thrown out from the periosteum, having the shape of the normal tibia. Four months after the operation, the patient was discharged, the bone being very strong, but the tibial ridge was deficient at the upper part, where the periosteum had ulcerated before the patient was admitted into the Infirmary. In the second case, that of a girl of eleven years, the whole shaft of the tibia was similarly affected and similarly removed, the resection above commencing immediately below the tubercle, while below it was an inch above the internal malleolus. Six months afterwards the entire shaft of the tibia had been reproduced, and felt perfectly solid. Prof. Spence thinks the advantages of this operation are: 1st, The early removal of a diseased texture, which affects the health; 2d, The removal of the diseased shaft lessens the risk of neighboring joints being affected; 3d, It obviates the risk of frequent hemorrhage from ulceration of enlarged periosteal vessels.—*The Lancet*, March 11, 1876.

Menstruation of Lapland Women.—Pastor Laestadius, of Jockmock, has undertaken to investigate this subject, with the object of showing how much reliance was to be put upon the statement that the Lapland women menstruate but once a year. He found, by making special inquires, that they first menstruated between sixteen and twenty years of age; that the intermediate period was four weeks, sometimes a little more or less; that the menstruation lasted four, and at most, six days. The Lapland women of whom the inquiry was made, claimed that this was the rule with them, as it is in other countries.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, May 13, 1876.

THE ARMY MEDICAL SERVICE.

At a time when the medical profession of this country is so much engaged in canvassing the merits of increased rank and pay in the medical department of the Army of the United States, the condition of the same staff in Great Britain becomes an object of interest. It is well known that the British medical department is in a bad way, and that its general availability as an effective arm of the Service has caused the deepest concern, not only among the medical profession, but with the legislators. The proposed short service scheme has proved itself so unpopular, that there is no reasonable hope for its becoming a law, while the discussion which it has initiated has alienated professional sympathy from the government more than would at first be imagined. The consequence has been, that there are still a number of vacancies to fill, and that candidates are not forthcoming.

The cause of this state of things is thus given in a recent number of the *Lancet*:—

"Taking the Services collectively, we may say that they have got a bad reputation with the profession; that this reputation was not the growth of yesterday, but has been slowly and steadily acquired; that there is a distrust of all government guarantees, and a belief that a position accorded to members of the profession in the public Services was, and still is, an unsatisfactory one; and that, as might naturally have been expected, a class of men have from time to time got into the Services which have, to some extent, justified the small estimation in which they appear to be held. Again, the public Services have to compete with civil life under certain obvious disadvantages—viz., those incidental to foreign service, and even expatriation, with probable risk to health, irksome or monotonous duties, distasteful discipline, and a well-grounded belief that the rewards do not follow professional or scientific attainments, but are attached to the exhibition of qualities that would have made a man successful if he had received relatively little education, but had been trained to habits of business. The truth is that students—at the English schools especially—and young medical men have of late years apparently ceased to regard the public services as a sphere of occupation and livelihood."

This seems to be the case in Great Britain; and, with slight modification, we have a parallel in the condition of the Services in our own country. There are vacancies in our medical staff which can be explained in the same way. As far as privileges with the attendant rank and pay are concerned, our English cousins have even better hope than we. For the past few years, every effort has been made to secure the passage of a law which should place the medical staff even on a decent footing with the other staff corps, but in vain; and even now, when so little is asked for, when the original demands for ordinary justice have dwindled into the insignificant petition for a slight increase in the number of officers who shall be privileged to hold the medium grades, Congress still hesitates to act, and the House Committee are timidly discussing the effect of the proposed innovation upon the Army appropriation. In regard to the whole matter, it must be acknowledged that not only the medical staff, but the profession generally, have placed themselves in the humiliating position of supplication rather than that of dictation. It is, however, beginning to wake up to the true state of the case, here as in England; and, while it may appear powerless to remedy existing evils, it may use the means of prevention for the future. In other words, if the government chooses to ignore the usual privileges to medical men, and refuses to grant reasonable requests, no competent and well-educated man will care to voluntarily place his neck into the yoke.

THE ABOLITION OF PRIZES BY MEDICAL PROFESSORS.

THE practice of conferring prizes upon students at Medical Colleges, for proficiency in special departments, has its advantages and its disadvantages. The latter so far predominate, that we are glad to learn that the College of Physicians and Surgeons of this city has abolished such awards altogether, and in their stead established some general prizes for proficiency in the final examinations for a degree. Although it might be made to appear that, in the offering of these prizes, the different members of the faculty stimulate extra study of their particular branches, yet this is almost always at the expense of time which should be devoted to a more general culture.

In the short period allowed for the mastery of even the principles of medicine, the student really has no time for becoming so proficient upon any one branch as shall entitle him to receive a medal. If students could combine all the mental qualifica-

tions necessary for being specialists in every branch, then the case might be different. As this is hardly possible, even among the most ambitious of aspirants for a degree, the main objection of sacrificing the whole course for the benefit of a part still holds good. The prizes for general proficiency would take into account all special talents and indirectly encourage their development in the prospect of adding to the chances at the final examination. The practice in the past, of giving prizes for services in special departments, is open to the serious objection of advertising the founders of said prizes to the general public on commencement days. On the whole, this is a very cheap and apparently innocent way of making known that Dr. A. is professor of surgery in the college, and Dr. B. of medicine, Dr. C. of obstetrics, and so on through the whole faculty. For fifty or one hundred dollars, each donor of such a prize has the privilege of this public announcement every year, with the chances of an advertisement in the next morning's daily paper. From a strictly business and personal point of view, it is certainly a profitable thing to be an awarder of a prize on such occasions; in fact, in the long run, it is even better to give than to receive. It is on this, as well as on some other accounts, that we commend the recent action of the faculty of the College of Physicians and Surgeons to the attention of similar educational bodies throughout the country.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, April 12, 1876.

Dr. Charles K. Briddon, President, in the Chair.

(Concluded from page 307.)

MORBUS COXARIUS.

Dr. Briddon presented a specimen of the head of the femur, removed by operation from a patient having the following history: Mary Kelly, aged 14, native of Ireland, was admitted into the Presbyterian Hospital, January 18th, 1876. Previous history: In February, 1875, she began to suffer from pain in the right knee-joint; after a period of several weeks it extended to the hip, the leg became gradually flexed, and on the 3d day of March she entered Bellevue, where she received appropriate treatment for a period of four months. On leaving the hospital she got about on crutches, and in September a swelling presented itself in front of the hip-joint; this gradually increased in size, without any mitigation of her suffering.

Present condition: She is a poorly-nourished child; right leg is flexed on thigh, the latter on the pelvis; the limb is adducted and rotated inwards; a large abscess is situate in front of the great trochanter; she suffers pain on movements of the limb, and these are aggravated at night, and relieved by extension; the limb was gradually brought into a favorable position by weight and pulley, and January 24th the abscess was opened by Prof. A. C. Post; this procedure was followed by free discharge of pus.

February 1st (service of Dr. Briddon). Abscess is discharging freely; she is much emaciated; has well-marked hectic, and a decubitus; the limb is extended and maintained in that position by the usual apparatus; during the next six weeks other openings were made at fluctuating points, but these were all situated disadvantageously for drainage, and at no time could the presence of fluid be made out posterior to the trochanter; the bed-sore was her chief annoyance, and to this source of suffering particular attention was directed; the sinuses were irrigated daily with disinfectants, and she was placed upon a liberal supporting treatment; towards the middle of March the bed-sore was nearly healed; the sinuses discharged large quantities of ill-conditioned pus; hectic still continued; and it was deemed proper to institute an explorative operation, to insure a more favorable outlet for secretions, and at the same time afford an opportunity for investigation, that might suggest more prompt and decided measures.

The operation was made March 23d, 1875, in the presence of the Hospital Staff and several medical gentlemen. After the patient was placed under the influence of ether, it was ascertained that there was about an inch shortening, which was considerably diminished by extension; no crepitus could be elicited by various movements of the limb; a probe introduced through the various fistulous openings detected no carious bone; a transverse incision was made above the superior border of the great trochanter, united to a vertical one passing in the direction of its posterior border; this incision disclosed a cavity filled with concrete pus, and the eroded head of the femur more or less divested of capsule, which was in a condition of pulpy degeneration; the head was not displaced from the cavity of the acetabulum; a chain-saw was passed round, and a section was made through the softened structure of the neck and great trochanter, above level of trochanter minor; on removing the head from the acetabulum, that cavity was found extensively involved; the circular depression in the floor of the cavity was eaten through by caries, and a finger introduced through this aperture came in contact with an opposing finger introduced per rectum; the obturator, anal fascias, and their enclosed muscles intervening, the constituent bones entering into the composition of the acetabulum could be easily traced, from the fact that the Y-shaped piece had disappeared below the level of the contiguous bones; these were more or less eroded, but in some parts covered by granulations; such of the edges as appeared to be necrosed were removed, the cavity was filled with oakum, and the patient was placed upon Sayres' wire cuirass. The head of the femur was almost entirely divested of its cartilage of incrustation, more or less worm-eaten, or irregular on its surface, the neck on its outer and upper surface divested of periosteum, and what remained of capsule was in a condition of advanced disorganization.

24th. Patient has passed an uncomfortable night; unfortunately the cuirass only came from the instrument-maker's the night before the operation; and on applying it, it was found that a portion of it pressed on the nearly-healed bed-sore; this necessitated the introduction of compresses, to relieve pressure and consequent disturbance of the parts involved, which can only be prejudicial to the future progress of the case. For the first four days after the operation the temperature ranged between 98° and 101°, lower than it had been previous to that procedure; during the

same time the discharges from the wound were exceedingly fetid; subsequent to that less so, and of more purulent character. On the 27th diarrhœa set in, with gastric disturbance and occasional vomiting, and her pulse ran up to 140; temperature 102 8-10°. Fresh bed-sores formed at various points of contact; and although every conceivable device was used to relieve pressure, it was found almost impossible to accomplish the thing satisfactorily.

After this date the condition of the patient progressed from bad to worse, in spite of the most careful nursing; the diarrhœa persisted, and the discharges were occasionally colored with blood; the appetite failed, and nothing was taken but brandy and soda, or milk and lime-water, and she died on the first day of April.

DILATATION OF BLADDER FROM VALVE-LIKE PROSTATE, ETC.

Dr. Briddon presented the genito-urinary apparatus, removed from a patient, concerning which the following history was furnished:—

Presbyterian Hospital, (service Dr. Briddon.)—Thos. Clifford, aged 60, admitted Feb. 21st, 1876. *Previous history.*—Patient says he has always been a strong healthy man, gives an obscure history of a long continued urethral discharge; his employment of late years has exposed him to extremes of weather, and he has been accustomed to go with wet feet. For several years he has experienced some trouble in urinating, and has found it necessary to rise several times in the night to do so.

Present condition.—Is a man of large frame and moderately well nourished, his underclothes are wet with urine, and his external genitals are soddened with the same discharge; he has constant stillicidium, a large-sized catheter enters the bladder easily, and removes about eight ounces of residuum urine which is strongly ammoniacal.

Per rectum, moderate enlargement of the prostate is detected, but is not regarded as sufficient to cause such constant overflow.

Microscopically the urine was found to contain a large amount of pus and blood elements, and the filtered secretion contained a large amount of albumen. He was put upon the internal use of benzoic acid, and was directed to have his bladder injected twice a day with water acidulated with nitric acid. After this date, his condition varied, at times the urine was very bloody and fetid, and the condition of the bladder as a reservoir varied; the stillicidium was always present; but at times, the catheter found no residual urine, and the attending surgeon expressed the opinion that he regarded the constant dribbling without distention, as signifying that the prostatic urethra was opened out by an enlarged wedge-shaped middle lobe. His general condition became gradually worse; failing gradually, he died on the 6th April.

Post-mortem examination.—Dr. T. E. Satterthwaite, Pathologist to the Hospital, April 7, 1876. Body well nourished; nothing abnormal noticed on the surface. *Thoracic cavity*, no abnormal amount of fluid in pericardial sac. Heart enlarged in transverse diameter, left ventricle considerably thickened, no dilatation of auricles or ventricles, valves normal, aorta faintly atheromatous, but not stiff. *Lungs:* no abnormal amount of fluid in pleural cavities, lungs normal, posteriorly hypostatic congestion. *Liver*, somewhat fatty. *Spleen*, small and contracted. *Kidneys:* in an advanced stage of diffuse chronic nephritis; capsules slightly adherent, surface of cortex granular showing cysts; ureters dilated. *Bladder* dilated—trabeculated, middle lobe of prostate as large as pullet's egg, and round, forming a sessile non-pedunculated tumor; false passage in the membranous portion, about seven and a half inches from the meatus. Head and intestines not examined.

A third specimen by Dr. Briddon was one of

SUBMUCOUS UTERINE FIBROMA AND LIPOMA OF THE NECK.

Margaret Pell entered the Presbyterian Hospital (service Dr. Briddon), March 13th, 1875. She is a widow, her youngest child being ten years old, has suffered from tænia for some time past; has a fatty tumor six inches in its long diameter, situated over the left sterno-mastoid overlapping its anterior border, and encroaching upon the lower portion of the tracheal region just above the supra sternal notch.

Per vaginam, a tumor of firm consistence about the size of a billiard-ball, continuous above through the medium of a pedicle about the dimensions of the index-finger, with the inner surface of the posterior wall of the cervix. Examined by the sound, the uterus is discovered to be of normal size. She has never suffered from uterine colics, and has only been troubled with menorrhagia for the last six months.

March 16.—The vaginal growth, steadied by a fillet of tape, was removed by the wire écraseur, the wire being passed high up within the cervix. After removal the parts were exposed by Sims' speculum, and it was ascertained that it was severed close to the cervical wall. The lipoma was removed by single long incision.

THE STRUCTURE OF CARTILAGE.

Dr. C. Heitzmann demonstrated a microscopic specimen of cartilage of the knee-joint of a dog, in which specimen he stated that carbon-granules could be seen within the cartilage-corpuscles, and in the basement substance. This change was produced by touching the articular surface of the cartilage with hot iron, seven days before the animal was killed. The carbon-particles, produced by burning of the cartilage, became transported up to a certain distance around the wound, so that the brown discoloration was not present in the immediate neighborhood of the wound. Such transportations, known to occur also with cinnabar-granules in the cartilage, were not explained for a long time, inasmuch as a basement substance of the cartilage was thought to be a structureless mass. Dr. H. remarked that he had succeeded in demonstrating the presence of a very rich network within the basement substance by painting the latter with nitrate of silver. This, he said, showed the spaces belonging to protoplasm empty; while the painting with a solution of chloride of gold brought to view the cartilage-corpuscles and the uniting network. The presence of living matter throughout the basement substance, explained the possibility of transportation of small foreign bodies, as in the specimen of cartilage exhibited to the Society.

NEW YORK COUNTY MEDICAL SOCIETY.

Stated Meeting, April 24th, 1876.

Dr. H. B. Sands, President, in the Chair.

The following gentlemen were elected members: Drs. P. F. Chambers, A. M. Jacobus, M. R. Vedder, H. F. Hessler, G. W. Ball, —— Ray, W. H. Wright, T. S. P. Miller, J. H. Rudwright, N. C. Levings, —— Clark, and J. J. Henna.

ON THE NATURE OF SUPPURATIVE PROCESSES IN THE SKIN.

Dr. Charles Heitzmann read a paper upon the above subject, which was interesting mainly in the fact that a new theory was advanced with reference to the production of pus corpuscles. Prefatory to the study of the microscopical changes, the doctor referred to the fact that certain persons were liable, in a marked degree, to the development of the suppurative process; that in certain cases union, by first intention, almost never occurred; that in such individuals there was commonly evidence of scrofulosis. In other cases in which the suppurative process was easily developed there existed distinct signs of old pleurisy or pulmonary consumption. In others, again, who were well developed, there was a special tendency to suppurative processes; but upon examining the family connections, evidences of the same tendency were usually found, and more closely associated with scrofulosis. Badly nourished children were specially prone to suppurative processes; and suppurative diseases of the skin were of frequent occurrence in persons whose nutrition was poor. Exhaustive diseases favored the development of suppurative processes — for example, abscesses following typhoid fever. Allusion was made to the fact that there was a notable difference in the tendency in different animals to the development of suppurative processes. For example, in rabbits and guinea-pigs, a peculiar tendency to suppuration was noted, and in those animals the development of artificial tuberculosis was not difficult, whereas in dogs such inoculations rarely succeeded. The general cause of any suppurative process was regarded as probably the same which gave rise to inflammatory processes; and that it manifested itself by changes affecting all the parts of the living tissue, including blood-vessels and nerves. Why such an extensive suppurative process manifested itself in small-pox, could hardly be suspected; and why chronic suppurations of the skin occurred in syphilis, was a puzzle equally as great as the question relating to small-pox. At one time search had been made for small organisms which, when present, would lead to suppuration, but success had not attended the effort. In certain cases, as in pyæmia and erysipelas, there might be a self-infection; and so far as the doctor's own observations had extended in connection with pyæmia, he had found purulent inflammation of the veins, without exception; but why the peculiar secondary manifestations, such as abscesses in the joints, etc. occurred, remained to be explained. Why erysipelas occurred as an endemic and epidemic disease was not known, although Hebra regarded the remote cause of erysipelas as existing in some local purulent formation. Reference was made to the development of suppuration by means of foreign bodies, organic material in a state of decomposition, strong acids and alkalies, heat, etc. The doctrine of a dyscrasia underlying skin diseases was rejected. Dr. Heitzmann here referred to the production of impetiginous pustules upon his own body by scratching. From that he passed to the consideration of the source of pus, as shown by the microscope. After reviewing the different theories which have been advanced regarding the formation of pus, Dr. Heitzmann presented his own, which was, in substance, as follows:

The matter commonly called protoplasm, was said to be built up of a true net-work, formed by masses of living matter, united to each other by delicate, thread-like connections, and suspended, as it were, in a material not endowed with the properties of life. The nucleus was held to be nothing but a compact mass of living matter; and its behavior, when treated with the chloride of gold, was the same as that of other elements of living matter. It was maintained that the matter between what are commonly called cells was not lifeless, but was a substance amply provided with living elements. This view was illustrated by studying the amœba, which had been supposed to be a lump of jelly-like living matter, called protoplasm, containing granules supposed to be foreign elements, but which Dr. Heitzmann maintained were thickened places at the points of intersection of a fine net-work of threads which pervades the whole mass. The animal, according to the new theory, represented a mass of living matter, the denser accumulations of which, formerly called cells, were connected by more delicate thread-like processes of the same living matter; and in the meshes of this net-work is suspended a fluid in which various corpuscles, such as blood corpuscles and pigment granules, might float. As will be seen, the theory supplanted the cell doctrine; for, what have been known as cells, as was claimed, were made up of granules and threads of living matter which unite the nucleolus with the nucleus, the nucleus with the periphery, and the threads permeate the substance between the so-called cells, thus effecting a union one with the other throughout the entire body. What formerly had been recognized as a cell, had no distinct entity, but was simply a fractional part of the innumerable whole. To the development of inflammation, the presence of blood-vessels, either in the part or its immediate neighborhood, was regarded as indispensable. The first step in the inflammatory process was a softening or liquefaction of the glue giving basis substance, and a retrocession to the embryonic appearance of the protoplasm, in which the protoplasmatic elements were again rendered visible. The first step then was a reappearance of the elements which constituted the tissue in its embryonic state. At the second step in the inflammatory process, the living granules, very often the nucleus, increased in size; there was a production of living matter to a certain amount; every such corpuscle, a living granule, increased in size, was capable of producing new elements; and all those elements were united with each other by means of the delicate threads to which reference has been made. That was the second step in the inflammatory process which leads to new formation. Now, if those thread-like connections between the enlarged granules of living matter became torn asunder, as they might from the tension produced by a large amount of exudation; if by any means the single elements were separated, they at once were pus corpuscles.

In the process of inflammation, then, the granules of the protoplasm increased in size, became detached from each other, and were then pus corpuscles. Pus, therefore, was metamorphosed tissue; pus corpuscles were elements of a former tissue separated from each other; pus was not tissue, nor was it capable of producing tissue; a pus corpuscle was a newly-formed protoplasmic lump.

Dr. Heitzmann then alluded to the difference in appearance of pus from a healthy person and from a person with a broken-down constitution. In those run down by starvation, etc., the living matter in a pus corpuscle was a very small quantity, while in a healthy individual the amount of living matter might be so great that the nucleus became invisible. The doctor claimed that he had been able to recognize the constitution of the patient by watching the movements of the pus corpuscle upon the heated stage under the microscope. The pus corpuscle from the unhealthy subject was much more lively than from

the healthy, because the amount of living matter which it contained was much smaller, and mostly in the form of threads.

Finally, said the doctor, "if we will omit such terms as dyserasia and the like, the microscope will be much more valuable in the diagnosis of disease than it is at the present time."

Dr. Andr. R. Robinson supported the theory advanced by Dr. Heitzmann, and believed that the fibrillary structure of living matter enabled us to understand many processes in pathology which previously have not been explained. It was regarded as specially valuable in the study of the formation of pus cells; and he had seen pus corpuscles formed, not only from the white blood-corpuscles, but from the nuclei of the ganglionic cells, and from the axis cylinder.

Dr. Mary Putnam-Jacobi asked Dr. Heitzmann what significance he accorded to the nucleus; did it retain any of its old elements?

Dr. Heitzmann replied that both nucleus and granules were built up of the same matter. It was not necessary that all of these granules should increase in size. On the contrary, many remain without much change. Just the same thing might take place with the nucleus. It was true, if the nucleus were surrounded simply by a shell of living matter, it invariably changed in the living solid body; it does not necessarily divide. But other granules might increase in size in the nucleus. Why that took place is not understood.

Correspondence.

THE DEATH OF LOUIS TRAUBE.

To the Editor of The Medical Record.

Sir:—As in February, by the death of Gabriel Andral, there passed away the great triumvirate of the Paris Medical School, composed of Louis, Chomel, and Andral, so this week records, by the death of Traube, the disappearance of a triumvirate in the Berlin Medical School—Dieffenbach, von Graefe, and Traube. There is a strong analogy in the disposition of the exponents of these respective seats of learning into THREES, while to-day the status of the schools themselves is widely dissimilar.

Traube died of pericarditis, after a lingering illness of many weeks, during the earlier part of which he irregularly appeared in his clinique, and in its latter part, as often happens in such diseases, every hope was entertained of his improvement.

Louis Traube was born January 12, 1818, in Ratibor. He studied in the Universities of Breslau, Vienna, and Berlin; was promoted in the last University in 1840, and took his State's examination the following year. During his ante-graduate years he was at one time a colleague of DuBois-Reymond, Virchow, and Helmholtz. In Vienna he was a most diligent pupil of Rokitansky and Skoda, who, it may be said, gave him the first incentives to those anatomico-pathological investigations which developed ultimately into the use of the thermometer and temperature registration in medicine. For three years after his graduation he acted as assistant to a physician in Voigtland, where with unusual zeal he made the clinical study of diseases of the chest and abdomen his chief pursuit. In 1843 he instituted exercises in auscultation and percussion, collected about him many physicians and students, and freed the new method of exploration, by his accurate physiological and pathological investigations, of many errors. In 1848 he was made Privatdocent in the University of Berlin; in 1849, assistant to the clinique of Prof. Schoenlein, which position he held for ten years. During this time he was assigned to the department of Diseases of the Chest in the Charité, which represented, as it were, an appendix to the Schoenlein-clinique, and gradually developed into a distinct, self-sustaining clinique. In 1858 he refused a call to the University of Heidelberg, as also later similar invitations to Breslau, Zurich, and Bonn. He remained an instructor in the University of Berlin until, in 1872, it saw fit to advance him to the position of Ordinary Professor, in which office he died.

Traube is known to the scientific world as the first one who utilized thermometry at the bedside. By his students he will be remembered for his definite diagnosis, accurate prognosis, and the simplicity of his presence. He was not only a remarkable practising physician, not only a clinical teacher of rare endowment, but also a man of exact scientific inquiry, and standing in the front ranks of reformers in medical, as distinguished from surgical, theories. Though still young, he has occupied for twenty years perhaps the highest position of any consulting practitioner of medicine in Berlin, in the opinion of the public.

The second half of the decade, 1840–50, witnessed here a reform in which Traube played a prominent rôle. It arrayed itself, on the one hand, against formal, dry dogmatism, which was at home in most of the doctrines of the German universities, and against the ultraism of the *à priori* system of the natural philosophy school; and, on the other hand, no less against the experiments made under the leadership of Rokitansky in Vienna, where, until then, no man had dared to express the conviction that pathological anatomy must be the groundwork, not only of medical science, but also of medical commerce; indeed, that it contributes all which goes to make medicine, as a science, positive and fundamental. The new Vienna School displayed a triumphant banner through all Germany; and, strange enough, it encountered harsh criticism from a few hitherto unknown young physicians of Berlin. A part of these young men pursued the studies of physics and physiology, as Helmholtz, DuBois Reymond, and others; while Traube and Virchow devoted themselves to pathology, by experiment and clinical observation. In 1846 Traube's first work, "Contributions to Experimental Pathology and Physiology," was published. After a quarter of a century of work in the same direction, he found no occasion to change his early results. Virchow writes, at this early time, of the independent direction of his experimental study, and of his most accurate methodical investigation. Typhus and pneumonia he studied with the thermometer in his hand. He developed the various actions of digitalis, with which Schoenlein was so pleased that he encouraged the investigation by large uses of the drug in his clinique.

As in diagnosis, so in therapeutics was Traube equally exact, and never tired in busying himself with details in treatment. Naturally enough, he was one of the most successful of teachers, and as a successful clinical instructor is he best known by most of the physicians who during the past twenty-five years have been graduated at this University.

At his funeral, the Medical Faculty, the Charité, the Friedrich-Wilhelms-Institut, several medical societies of which he was a member, and the Ministry of Ec-

clesiastical Education, were represented officially. The burial services were after the Jewish rite, and were attended by a large concourse of physicians and citizens. An immense line of carriages followed to the Jewish cemetery in Schoenhanser Allee. QUANT.

BERLIN, April 14, 1876.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from April 30th to May 6th, 1876.

EDWARDS, S. A., Surgeon.—Leave of Absence extended six months on Surgeon's Certificate of disability. S. O. 84, A. G. O., April 28, 1876.

MAGRUDER, D. L., Surgeon and Medical Director.—Granted leave of absence for one month. S. O. 49, Department of Arizona, April 17, 1876,

WOODHULL, A. A., Assistant Surgeon.—Granted leave of absence for two months, with permission to apply for an extension of one month. S. O. 12, Department of the South, May 2, 1876.

LIPPINCOTT, H., Assistant Surgeon.—In addition to his other duties, to assume charge of the Medical Director's Office, during absence of Surgeon Magruder. S. O. 49, c. s., Department of Arizona.

TAYLOR, M. E., Assistant Surgeon.—Assigned to duty at Baton Rouge, La. S. O. 84, Department of the Gulf. May 1, 1876.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending May 6, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
April 29th.....	0	5	96	6	73	85	33
May 6th.....	0	14	62	4	48	89	20

INTERNATIONAL MEDICAL CONGRESS AT PHILADELPHIA.—The Medico-Chirurgical Society of Montreal has elected Drs. R. T. Godfrey, W. H. Hingston, George E. Fenwick, R. P. Howard, George Ross, E. H. Trenholme, and John Bell delegates to the Congress.

In addition to the distinguished visitors to the Congress previously mentioned, we learn that Prof. Lazarewitch, of the University of Charkolf, Russia; M. Warlomont, General Secretary of the International Congress of Medical Sciences, at Brussels; Mr. Thomas Joliffe Tufnell, President of the Royal College of Surgeons of Ireland, and Dr. Lauder Brunton of London, Editor of the *Practitioner*, have expressed an intention to be present.

GERMAN SURGICAL SOCIETY.—At the meeting of the Fifth Congress of the German Surgical Society, papers were read by Esmarch on the antiseptic treatment of wounds in military service; by Berns, on Lister's treatment of wounds in Freiburg; by Trendelenburg, on a new apparatus for the antiseptic closure of wounds; by Burchardt, on a modification of Lister's dressing; by Graf, on cotton and tannin dressing; and by Burow, on the open treatment of wounds.

PROFESSOR MERKEL, of Leipsic, long known as an instructor in laryngology, recently died at an advanced age.

DR. MORITZ KÖRNER, of Graz, died upon the 12th of April, after a short illness, in the 56th year of his age. He was Professor of Special Pathology and Therapy, and was regarded as one of the most gifted men and earnest workers in the university.

FEMALE EDUCATION IN ST. PETERSBURG.—The Commission appointed to consider the advisability of establishing a course for women at the University of St. Petersburg has expressed itself as opposed to the project.

LORAIN.—The pupils and friends of Lorain have united in an effort to secure a marble bust of their preceptor, for presentation to the medical faculty. The subscription is signed, among others, by Jeoffroy, Lépine, Prevost, Claude Bernard, and Marey.

NEW YORK EYE AND EAR HOSPITAL.—Since the Manhattan Eye and Ear Hospital began its work on the 15th of October, 1869, fourteen thousand seven hundred and eighty-three (14,783) indigent persons have been treated in its dispensary and wards; and, during the same period, two thousand nine hundred and sixty-four (2,964) important surgical operations have been performed upon the Eye, Ear, and Throat. During the year ending December 31, 1875, three thousand two hundred and thirty-one (3,231) patients were treated and seven hundred and four (704) operations performed. The daily average number of persons treated at the dispensary was fifty-seven (57). The whole number of patients treated as hospital inmates for the year was two hundred and thirty (230). The number of days' board furnished to these patients was two thousand eight hundred and ninety-eight (2,898). Notwithstanding the unparalleled monetary stringency the Hospital has not only been enabled to continue its beneficent work, but to lessen the burden of its indebtedness. The purpose of the founders of the Hospital was to develop an Institution in the centre of the city which should meet the necessities of the poor. To this end the plot of ground 100 by 80 ft. was secured at the very focus of the city railways, that easy access might be had by the thousands of poor who would resort to its Dispensary and Wards. The site alluded to is the best for the purpose on New York Island. The professional staff of the Hospital consists of fourteen medical men: C. R. Agnew, M.D., D.B. St. John Roosa, M.D., O. D. Pomeroy, M.D., C. I. Pardee, M.D., Andrew H. Smith, M.D., Beverley Robinson, M.D., F. R. Sturgis, M.D., David Webster, M.D., F. H. Rankin, M.D., D. R. Ambrose, M.D., G. W. Chamberlain, M.D., G. F. Carey, M.D. C. S. Bull, M.D., Pathologist; W. Cheatham, M.D., House-Surgeon.

SEATS FOR SALESWOMEN.—The ladies of Manchester (England) are urging upon shopkeepers the propriety of providing seats for their saleswomen when not engaged in serving customers. For reasons which are obvious to medical men, the appeal should be heard, not only in Manchester, but in every other place where saleswomen are employed. Why not start such a petition here?

THE ODOR OF IODOFORM.—A correspondent asks what will destroy the odor of iodoform, and refers to the following pitiable situation of one of his patients who is using it: "I am treating a patient with chancroid, who wishes for concealment at his business. He is in close contact with others, and every

now and then he is startled with the expression, "Who has a chancre in this crowd? I know iodoform by its smell. Its odor is a complete tell-tale." Who can help the poor sufferer out of his difficulty?

THE PHYSICAL EFFECTS OF "COCA."—At a recent meeting of the Edinburgh Botanical Society, a paper was read by Sir Robert Christison on the restorative and curative effects of the coca leaf of Peru (Erythroxylon coca), which has for many years been valued by the Indians as a preventive of bodily fatigue, and which has lately attracted much attention, owing to a belief that it was of some service to the American pedestrian, Mr. Weston, on the occasion of some of his walking feats at the Agricultural Hall. A diversity of opinion exists as to the effects of the coca leaf on those who chew it. By some travelers it is maintained to be a pernicious stimulant, while others hold the opinion that, moderately used, it is beneficial to health. Of its effects Sir Robert Christison gave an account, ascertained by experiments he had made himself with a coca leaf, by which he had found that it was both a preventive of fatigue and a restorative of strength after severe bodily exertion, and that it had no reactionary effect on the system. His first experiments made with the leaf were in 1870. Two of his students had come home thoroughly tired out with a sixteen-miles walk; instead of having dinner they each took an infusion of two drachms of coca; presently all signs of fatigue vanished, and they "promenaded" Princes street for a whole hour with ease and enjoyment. On returning home they ate an excellent dinner, felt light throughout the evening, slept well, and got up refreshed and active next morning. Similar results were obtained in the case of other ten students, some of whom had done a thirty-miles walk; and Sir Robert has also made experiments upon himself with a coca leaf of an equally successful nature. He is, it seems, overwhelmed by letters from all quarters asking for information respecting it. Women especially, having tried every other form of narcotic and stimulant, are very anxious to begin with the coca leaf. One lady who has written to Sir Robert Christison on the subject, "put her question in such a shape that he saw plainly that she meant to ask whether it would renew her youth."

THE DAWSON AND PIFFARD BATTERIES.—The committee from the New York Medical Journal Association to report upon the relative merits of the batteries offered by Drs. Dawson and Piffard has been announced, and consists of the following named gentlemen: Dr. J. W. S. Arnold, on the part of Dr. Piffard; Dr. A. McLane Hamilton, on the part of Dr. Dawson; and Dr. John J. Mason, on the part of the Association.

FACULTY PRIZES.—At a recent meeting of the Faculty of the College of Physicians and Surgeons of the City of New York, it was voted to discontinue all Faculty prizes, and in their place to award three prizes for general proficiency in examination: a first prize of one hundred dollars; a second prize of fifty dollars; and a third prize of twenty-five dollars.

POST-PARTUM HEMORRHAGES.—A very simple and efficient method of arousing an inert uterus to contraction is to dip the end of a towel in cold water and smartly slap the hypogastrium. Prof. Isaac E. Taylor, with whom the plan of treatment originated, says that he never saw it fail when properly carried out.

THE BRITISH MEDICAL ASSOCIATION has been invited to hold its next session in Sheffield, instead of Brighton.

STROMEYER'S FIFTIETH PROFESSIONAL ANNIVERSARY, recently celebrated in Hanover, was a great success. The Dublin *Medical Press* says:

"For days before the eventful one, each train which arrived at Hanover brought some of the *élite* of the medical profession from some part of Germany. On the eve of the day several hundred people assembled before his (Stromeyer's) house to sing and repeat eulogies in his honor. Early on the morning of the 6th, he received an autograph letter from the Emperor of Germany, accompanied with a magnificent vase. The order of Red Eagle was presented him by Prince Albrecht from the Emperor. Telegrams from all directions, even from China, arrived, carrying congratulations; and deputations from the various universities of Germany and from England presented addresses. At five o'clock an excellent dinner was provided; three hundred covers were laid. Stromeyer was supported on his right by the Governor of Hanover, and on his left by the President of the German Parliament." It is a very pleasant thing to note such a recognition of distinguished professional services.

SIR WILLIAM ROBERT WILDE, Surgeon-Oculist in Ordinary to her Majesty in Ireland, died at Dublin, April 19. He established the first hospital for ophthalmic diseases in Ireland forty years ago, and at his own expense. His famous work on Aural Surgery has been translated into several languages. He was knighted in 1848 for distinguished professional services.

PEDESTRIANISM AND VERTIGO.—The success of Mr. Weston's recent walk at Birmingham (Eng.) was marred by the occurrence of vertigo. The *Lancet*, in referring to the latter condition, is "convinced that such exhibitions of endurance are made at great risk, and are difficult of justification. Walking is a natural thing, but walking 150 miles in 38 hours is not according to nature."

MEDICAL EDUCATION IN GREAT BRITAIN.—The *Students' Journal and Hospital Gazette* (London), after alluding to our criticism upon the cumbrous systems of medical education in Great Britain, and the necessities for reform, says: "We commend these words to our medical reformers as showing how our systems are judged of by impartial critics across the Atlantic, and as giving some evidence of how ridiculous we should appear could we 'see ourselves as others see us.' It is, indeed, time that some steps were taken to place our system of medical education on a better basis, and do away with the ridiculous system which allows the registration of half qualifications, and encourages the competition of nineteen examining bodies."

ARSENICAL WALL PAPERS.—Out of twenty-one specimens of room paper, Dr. Hodges, analyst for the county of Antrim, found fourteen of them to contain arsenic in large quantities.

THE SULTAN'S MEDICAL STAFF.—The medical bills of the Sultan amount to £28,000 yearly. The visit of the doctor to his august patient is made in great state; he is preceded by an officer carrying a huge sword, while two others, armed to the teeth, march by his side. Notwithstanding the impressiveness of the ceremony, the doctor and his attendants are in winter often snowballed as they pass through the court-yards. Comment is unnecessary.

NURSE-TRAINING.—It is proposed to found a school and hospital for the proper training of nurses in London. Miss Nightingale asks for £20,000 and an income of £5,000 for the proper carrying out of this

scheme. This sum will permanently endow a hospital of one hundred beds.

Cremation.—A cremation society at Dresden proposes to hold a congress in that city on the 6th and 7th of June, when various experiments will be made. The advocates of cremation are chiefly to be found in Holland, one society alone at the Hague numbering 1,300 members. Holland is determined to keep up its reputation for ovens.

Nasal Catarrh Treated Locally.—Mr. W. Spencer Watson. (*Lancet*, April 22.) in referring to Dr. Ferrier's communication, "How to cure Cold in the Head," speaks very highly of the good effects of tobacco snuff. The first pinch generally excites sneezing, but after the second and third pinch the powder remains in the nostrils, and forms a coating for the mucous membrane. A flow of thin serum then begins, and the sense of fulness and obstruction at once subsides. In a few hours the cold is cured, or at the latest survives only a single night. The snuff should be used freely, and the coating formed by it on the mucous membrane should be left undisturbed for several hours, blowing the nose being meanwhile avoided, until all feeling of "stuffiness" in the nostrils has subsided.

Small-Pox Hospitals.—The medical profession at Lyons, France, are not in favor of establishing small-pox hospitals. It is a common practice to admit variolous patients into the wards of general hospitals. The Lyons people deserve to be "pitted."

Fork Swallowing.—On the 15th of April last M. Labbé performed gastrotomy at La Charité for the extraction of a fork which had been swallowed by a young man two years before, in a frolic. The presence of the fork was recognized in the stomach in an oblique position, with the prongs directed toward the cardiac extremity. The patient suffered no inconvenience from the foreign body until a few months before the operation. The Paris correspondent of the *Medical Examiner*, London, under date of April 20, completes the history of the case from this point: "He complained of a continual pain in the left hypochondrium, and was gradually losing his appetite and strength. The fork was in the same position, lying obliquely across the stomach. Surgical intervention was then judged necessary. M. Labbé at first intended to produce adhesive inflammation between the tissues of the epigastric region and the stomach; and several applications were accordingly made, but the desired result was not obtained. Gastrotomy was therefore performed on Saturday last by M. Labbé, assisted by M. Gosselin and Baron Larrey. After opening the peritoneal cavity, the surgeon incised the stomach with a bistoury, and the fork was found in the position above described. What will be the final result of the operation, I cannot tell now; but I have just learned from M. Labbé that the patient is going on well, and that his recovery is most probable. A clinical record of this interesting case and of the operation will shortly be communicated to the Académie de Médecine. This is not the first case in which a fork has been accidentally introduced into the stomach. The first instance is recorded in the *Journal des Savants* for 1716. Sédillot published in his 'Contributions à la Chirurgie' the history of a woman who had swallowed a silver fork, and retained it seven months in the stomach. Gastrotomy was performed by Cayroche, a surgeon of Mende, and the patient was completely cured twenty-five days after the operation. Fedeli extracted from an abscess in the right hypochondrium a fork which had remained for two years in the alimentary canal. Schwab performed the operation of gastrotomy in a young woman twenty-four years old, and extracted a fork which had been 229 days in her stomach. M. Baillarger has reported in a recent number of the *Union Médicale* the case of a lunatic who lived six years with a tin fork in the stomach without feeling any inconvenience, except when making violent movements. After his death, which happened from other causes, the fork was found blackened and imbedded in food. Some thirty years ago, a mountebank, who was in the habit of putting different objects down his throat, let a fork slip into the stomach; the foreign body was immediately removed by the mouth by means of forceps. As may be seen from the cases thus briefly related, forks introduced into the stomach have been removed by very different procedures: 1. By gastrotomy; 2. By the mouth with forceps; 3. Through an abscess produced by adhesive inflammation of the walls of the stomach; 4. By the anus, without any medical or surgical interference."

Children's Hospitals are to be established in Spain, supported, as here, by voluntary contributions.

Lady Students will not be admitted to the University of Prague.

Immorality in a Public Institution.—Dr. Fleming, the founder, and for many years the director, of the Institution for the Blind at Hanover, has been found guilty of immoral conduct towards his emale pupils, and has been sentenced to nine years' imprisonment and a loss of civil rights for five years.

Small-Pox in Bombay.—There is an epidemic of small-pox in Bombay, and the town council has voted for compulsory vaccination.

Cholera.—The Prussian government has created a Cholera Committee, to deliberate on the measures to be taken in the event of an outbreak of the disease.

Yellow Fever in Rio Janeiro.—The deaths from yellow fever in this place average fifty daily.

Dr. Janeway on Discussion of his Paper on Leucocythæmia.—Dr. Janeway writes: "In the discussion on the paper on leucocythæmia, I am quoted (page 306) as saying that 'the existence of splenic and glandular enlargements and the entire absence of blood changes,' etc.

"It should read: 'that the existence of splenic and glandular enlargements in the two diseases, leucocythæmia and pseudo-leucocythæmia, with marked increase of white globules in the former, and the absence of such increase in the latter disease, presents a condition which we cannot at present explain.'"

Weekly Bulletin of the Meetings of Medical Societies.

Saturday, May 13.—N. Y. Medical and Surgical Society.

Monday, May 15.—N. Y. Society of Neurology; Pathological Society of Brooklyn.

Tuesday, May 16.—N. Y. Obstetrical Society; N. Y. Dermatological Society; Medical Society of County of Kings.

Thursday, May 18.—N. Y. Academy of Medicine.

Friday, May 19.—N. Y. Medical Journal Association.

Original Communications.

THE ADVANTAGES OF THE COTTON PESSARY.

By R. A. PAGE, M.D.,

WASHINGTON, D. C.

The interesting article of Dr. James D. Trask, in the Record of May 6th, together with the approval which the cotton pessary has received from the profession generally, prompts me to report the results of its further use, and to describe some of the modifications and improvements which have since been made in it.

I now make the pessary with a more delicate shaft, not so thick at the extremities, not so long, and roll it more compactly, making it four inches long, and the extremities about one inch and a half in diameter. The manner of making it, as described in my article in the *New York Medical Journal* of Jan. 1876, has been improved by lessening the width of the prepared piece of cotton to six inches, and by thinning out a space two inches wide along the middle of the piece; this leaves a thin layer through the centre of the piece, which, when the cotton is firmly rolled on the thin rubber rod and tightly wrapped, makes a very delicate isthmus. A curved rod of hard rubber one and a half inches long and $\frac{3}{16}$ of an inch in diameter is now used.

As an improvement, suggested by Prof. A. F. A. King, I have dipped the pessary in a solution of caoutchouc (by either bisulphide of carbon or chloroform), which deposits a thin, elastic, and durable film of rubber smoothly over the surface of the instrument. When it is desirable to retain the pessary for a number of days, and in cases where local medication of the cervix is not necessary, this addition to the instrument is a valuable one. The thin film of rubber protects the cotton from the vaginal and cervical secretions, adds to the elasticity of the instrument, and does not affect the consistency and smoothness of the extremities.

In the many cases of vagnal hyperæsthesia and extreme tenderness of the uterus associated with displacement, when hard rubber, silver, or any other instrument of comparatively hard material could not possibly be tolerated, the cotton pessary has invariably been retained and worn so entirely without discomfort, that patients frequently tell me that they forget its presence in the vagina.

The three following cases will serve to show the application and use of the pessary in cases of prolapsus, ante- and retroversion:—

G. W., aged 25, has had two miscarriages. Complained of constant lumbar and sacral pains, sensation of weight and dragging, referable to the pubes; vesical tenesmus, constipation, and hysteria. Able to go about her room. I found upon examination prolapsus of the uterus in the second degree, cervical hyperplasia, great erosion of the face of the cervix, and profuse cervical and vaginal discharge. She was directed to use copious injections of water as warm as could be comfortably borne, for fifteen minutes night and morning, and to remain in bed. The injections greatly relieved her pains, and the vaginal discharge had considerably decreased on the third day, when I applied, through a Sims' speculum, a cotton pessary, after saturating it with carbolized glycerine. One end of the pessary was placed against the cervix and gently pushed into the vagina until it had well passed the sphincter. From the curved form of the pessary, the lower extremity, extending a little beyond the vaginal axis, found its place against the pubes, where it was held while the speculum was withdrawn. The patient was then allowed to get out of bed, and said that she experienced, for the first time in six months, relief from the abdominal and lumbar pains. She was directed to remove the pessary at bed-time, and take injections of hot water. After inserting it for her several times, and instructing her as to its introduction, she used it herself, and from the first application of the pessary was able to go about, in and out of doors, with perfect comfort. For three months she used these instruments constantly, and at the expiration of that time was sufficiently relieved to abandon it. During this time the dysmenorrhœa, which periodically intensified her suffering, had been less severe each month, and normal menstruation was finally restored. In connection with the local treatment, remedies to relieve the constipation and general debility were used.

Mrs. E. J., aged 29, has one child. Miscarried one year ago, since which time she has had more or less uterine derangement. First saw her in an attack of acute metritis, and afterwards treated her for complete anteversion, which I found subsequently. I placed the uterine extremity of the pessary in the location of the anterior cul-de-sac, and engaged the other end inside the pubes. The patient was instructed as to its introduction; wore it for ten weeks, when she ceased to wear it constantly, only introducing it as a precautionary measure, when she had work to do which required more than usual exertion.

Mrs. F. has five children; has been in ill health for three years; treated during that time for lumbago, rheumatism, and sciatica without relief. Her physicians had made no vaginal examination, and therefore did not discover the source of her suffering. Complete retroversion—slightly lateral; thickening of the anterior wall of the cervix and fundus, with an interstitial fibroid in the latter; dysmenorrhœa; constant pain in back and hips; numbness of the thighs; and profuse leucorrhœa. After the use of warm-water injections for a day or two, the pessary was inserted, one extremity thrust in the posterior cul-de-sac, the other end supported at the pubes, as in the other cases. The patient's husband has been taught to use the Higbee speculum, and, through it, daily introduces the instrument for her. This lady is entirely relieved of the numbness in the thighs, and the pain at the sacrum; the discharge has very much decreased, and she is able to walk long distances—an impossibility previous to the institution of this treatment. The general health of the patient is very much improved; and were it not for the fibroid and increased weight of the uterus, I have no doubt she would, in a short time, be able to dispense with the pessary.

On removing the pessary at night, it is placed in a solution of carbolic acid during the night, and reanointed in the morning with glycerine before it is replaced. One instrument is used in this way two days, after which it is allowed to soak in the acid solution for two days, while a new pessary is being used, and can be used again. Among the poorer classes who manage in this way, a few pessaries will last a long time. I have carefully examined the instruments treated in this way, and have yet to discover the slightest fetor.

In many cases where a permanent support was necessary, I have prepared the parts for the ultimate introduction of the Hodge or Higbee pessary, by using, at first, this unirritating support, overcoming, gradually

the vaginismus and extreme tenderness, by its daily introduction, and rendering them at last tolerant of a harder instrument. I have had many patients whose uteri had become so irritated and sensitive from wearing various forms of hard pessaries, that at first they were almost unable to bear the introduction of the soft cotton.

Dr. Trask, of Astoria, L. I., after reporting the excellent success which he had in the use of a pessary made according to my description in the *New York Medical Journal*, suggests a new mode of applying them, and that they can be made with advantage, of soft rubber. I have no experience in the method of applying it. Dr. Trask applies the pessary so curved that the ends are fitted in the anterior and posterior cul-de-sacs; in this he depends upon a tonicity of the vaginal walls, which is not found generally in cases of displacement, or the vagina has to be distended sufficiently to tightly hold the instrument. In the latter case the rectum and bladder must be considerably impinged upon. This seems to me to be an objection to this mode of applying it. Dr. Gaillard Thomas recommends the placing of cotton balls in front and back of the cervix, which for the same reasons are not easily retained—a complaint made by Schroeder. The plan of Dr. Trask, if the instrument can be retained in that position, gives the uterus more support than the balls of cotton. The cervix is made to rest upon the curved isthmus of the pessary, by placing the extremities in the anterior and posterior cul-de-sacs; but as far as my experience goes, a pessary of whatever material, so long as it be of the dumb-bell form, would be of most service applied in the manner which I have described for the application of the cotton instrument.

Dr. Trask's desire to have them made of soft rubber, probably originated in his objection to the time and trouble required to make the cotton pessary properly, and to the fact that they had to be constantly renewed. These, I admit, would be formidable objections were it necessary for every physician to make them himself; but when I gave the results of my experience with this instrument to the profession, it was with the hope and belief, that, if others had the excellent success in its use which I had, it would be taken up by the manufacturers, and made in such quantities, and at such a small cost, that it could be procured like any other instrument which is constantly in demand.

Whatever the advantages of other material may be, the soft, clean cotton has in my experience given such good results, combining as it does unirritating support, and the opportunity for local medication, that I prefer it to anything else, notwithstanding the time and trouble involved in its preparation, and the necessity for its frequent removal.

The latter objection, however, is entirely removed by the use of a covering of thin rubber cloth, as manufactured by Messrs. John Reynders & Co., New York.

1115 F St., N. W., Washington, D. C.

NOTES ON DIPHTHERIA.

By E. R. MAXSON, M.D., LL.D.,

Syracuse, N. Y.

When I first ventured to classify diphtheria as a "general febrile affection," in 1861, though fully convinced that its pathology demanded it, I had no little misgiving as to the manner in which it might be received by the profession, and especially those who had written upon the disease, who had, as far as I know, invariably treated it as a local throat affection, liable only to accidental general complications, of a febrile or other character.

But a very general acquiescence by the *best writers*, in this country and abroad, in the classification, as I thought, on strictly legitimate principles, relieved my mind. The *North American Medico-Chirurgical Review*, then ably edited by Prof. S. D. Gross, I believe, referred to the fact, without comment; and the late Prof. S. H. Dickson assured me that I was "right," and that he had only treated of diphtheria as a *local* disease, "in accordance with the universal custom, as a matter of convenience."

And I may further add, that my convictions as to the true pathology, and hence, proper classification of diphtheria were arrived at, after carefully tracing the history and progress of the disease from its origin in Egypt, more than two thousand years ago; extending only into Asia Minor during the first five hundred years; then invading the south of Europe, and crossing the Continent during the next fifteen-hundred years, affecting principally garrisoned towns—till, reaching Paris, London, and Liverpool, it passed to various other parts of the world, including our own. In addition to this, it had been my lot to be brought in contact with the disease in all its various forms and complications; as the village and vicinity of Geneva, in this State, where I was located, had for a few years preceding 1861, been the theatre of perhaps more diphtheria than any other on this continent, and, so far as I know, in the world.

My observations since 1861, and conversation with prominent pathologists, in this country and abroad, have confirmed me in the position I then took: "That *diphtheria is essentially a general putrid fever, analogous to, and belonging with plague, typhus, etc*," and not properly, as its name would imply, a merely local throat affection; or in any degree analogous to croup, but invariably the result of *contagion*; or else of introduction into the blood, through the skin, stomach, or lungs, of *animal* or *marsh miasms*, probably as cryptogamous plants, or microscopic animalcules, or both, —call them *bacteria*, or whatever the fancy may dictate—the blood in every case becoming contaminated, and undergoing more or less local or general decomposition; and hence the *fibrino albuminous exudations*, of various degrees of organization, on the mucous membranes of the air-passages and alimentary canal, as well as on the lining membrane of the heart, arteries, veins, etc, as I have witnessed—one marked case of which was the patient of my friend Dr. J. D. Smith, of Geneva, N. Y., which was examined in the presence of several prominent physicians of that town. And within the past month I have witnessed, in this city, the expulsion at one time by a boy fifteen years old, on the fourth day of the disease in a malignant form, at stool, what appeared to be one continuous membrane, from the entire length of the alimentary mucous membrane, measuring about a pint.

In this case, the disease was evidently produced by *miasms* generated in an immense heap of decomposing animal and vegetable matters, near the street he passed, in the outskirts of the city, on his way to school. The disease was rapid in its inception and progress, perfect casts of the anterior nasal passages having been expelled two days later by violent efforts; the larynx having been kept comparatively clear by the constant spasmodic vomiting kept up from the first, which I was unable to control; the forcible expulsion being attended with quite profuse hemorrhage.

This case has recovered, and, though I gave him cincho-quinine, the tincture of chloride of iron, carbolic acid, milk-punch, &c., I am inclined to think that, except for the spasmodic vomiting, which I could not control, he might have suffocated before the general remedies could have been brought to bear in correcting the general condition. And this reminds me of the fact that I once saved a child in Geneva, six years old, by vomiting it, several times a day, when about to suffocate, for nearly a week; keeping up, as I did in this case, the tonics, stimulants, gargles, etc.

In cases of diphtheria produced by putrid animal and vegetable exhalations, I do not believe the *miasm* is generally of sufficient concentration to develop the *fibrino-albuminous* exudation, by the local decomposition of the blood of the part, independent of, and before its general contamination and decomposition; but the *contagion* from malignant cases, brought in contact with a mucous membrane or even abraded skin, may be so concentrated as to produce the local manifestation of the disease before there is any apparent contamination of the general system; though, unless counteracted, it rapidly follows, if it does not always precede, as it generally does, though perhaps unnoticed, in some very rare cases, through inattention. I once attended a lady in her first confinement, while I had under my care cases of malignant diphtheria; and though I took what I regarded as the proper precautions, the diphtheritic membrane developed rapidly, upon the mucous membrane of the vagina and the external genitals, without much apparent general contamination of the system. She took milk-punch, and the membrane was rapidly removed by proper local applications, as strong sage tea, with alum and borax; and though the lady herself appeared to suffer but little, having a good recovery from her confinement, the babe died in two days of malignant diphtheria, and her nurse, a young woman, in about one week, with no other apparent exposure.

I have just had, however, a marked case, tending to show that what may appear like a purely local, is really a general affection, demanding corresponding treatment.

A young woman of seventeen, in the same house with, though kept apart from, a malignant case of diphtheria, disinfectants having been freely used, had excessive irritation of the mucous membrane of the anterior nasal passages, attended with a thin sanious discharge, which kept up for several days in spite of the usual applications, including carbolic acid in water, etc. She had a good appetite, and followed her usual vocations of household duties, study &c. After about one week the tonsils swelled, and a diphtheritic membrane appeared upon them, the nasal irritation still keeping up and being attended with the discharge. As she appeared quite well, I still gave her only gargles of carbolic acid in water, muriate of ammonia in vinegar and water, sage tea, with alum and borax, etc., with no apparent relief; and though she still appeared quite well, I then gave her cincho-quinine, the muriated tincture of iron, whiskey, and improved cathartic pills, when the membrane rapidly disappeared from the tonsils, the nasal irritation subsiding, as well as the discharge ceasing, the gargles being continued.

It is likely, then, that in those cases, apparently *local*, there is generally, if not invariably, more or less general putridity of the blood, leading to the general and local febrile and inflammatory symptoms which are developed, rendering diphtheria, emphatically, *a general contagious putrid febrile affection*, as foreign from croup as any general putrid fever can possibly be from a simple benign inflammatory fever; the exudation in membranous croup consisting of fully organized, uncontaminated *fibrino-albuminous* matter, and purely the result of a simple sthenic inflammation; while in diphtheria it is more or less imperfectly organized, being the product of partially decomposed blood, and attended with more or less *passive* inflammation, congestion, and a general asthenic febrile condition, *continued* or *remittent*, as the *animal* or *marsh miasm* may have predominated in producing the disease in each particular case; the *animal*, in my opinion, being an *essential*, and the *paludal* a frequent additional cause, carrying its peculiar characteristics, and increasing the malignancy, as I have often noticed.

I was first led to the use of *milk-punch* in diphtheria, from finding a diphtheritic membrane, expelled from the trachea of a child, all *dissolved*, in a few days, in the alcohol I had put it for preservation; inferring that if it would *dissolve*, it might tend to *prevent* the organization of the membrane, as well as to arrest the decomposition or fermentation of the blood, as it is well known to do to various animal and vegetable matters. And, while I now have great confidence in quinine or cincho quinine, the tincture of chloride of iron, carbolic or salicylic acids, gargles, and plenty of nourishment, especially *milk*, I still regard *milk-punch*, in quantities adapted to each particular case, as indispensable in the treatment of diphtheria. And, *to clear the nose or throat* of the sanious, viscid, or half organized putrid exudations, so annoying and dangerous to the patient, I prefer by far, *warm milk*, snuffed up the nostrils or used as a gargle, to any other liquid. It soothes; and, uniting with, aids in the expulsion of the detached collecting matters, more than anything else I have found.

No. 208 Madison Street, Syracuse, N. Y., May 1, 1876.

CASES ILLUSTRATING THE POSSIBILITY OF A CONNECTION BETWEEN MALARIAL POISONING AND CHOREA.

By FRANK P. KINNICUTT, M.D.

NEW YORK.

The possible influence of malaria in the etiology of chorea has been suggested by several authors, but the literature of the subject is, so far as I am aware, devoid of any probable *demonstration* of such a causal relationship.

If we accept the view that chorea is essentially a disease of impairment of nervous power, at the same time bearing in mind the well-known enfeebling and depressing effect of malarial poison upon the nervous system, we should, *à priori*, be led to look for clinical evidence of the, at least, occasional dependence of this affection upon a morbid influence of this nature. The non-occurrence of chorea in adults subjected to a prolonged exposure to malaria, cannot justly be regarded as an argument against such a genesis; inasmuch as this disease, from *any cause*, only exceptionally occurs after the age of puberty.

The following cases, which have recently come under my observation in Dr. Seguin's clinique, at the College of Physicians and Surgeons, possess much interest, it seems to me, in view of the above considerations:

Case I.—E. H——, male, aged six. First seen March 4th, 1876. The patient was in excellent health until two months ago, when, without apparent cause, he began to be troubled with "night terrors," and to seem

and feel poorly. A week since, his mother noticed a slight apparent loss of power in the lower extremities, with disorderly movements of the upper. These symptoms have increased in degree up to the present time. His speech has also become affected. The mother states that he is decidedly worse every other day. There is no history of rheumatism.

Examination.—There are marked choreic movements of the extremities, with a decided loss of power. He is unable to stand without support, and his speech is affected. The heart-sounds are normal. The patient was directed to take six grains of quinine daily.

March 11th.—There is marked improvement in the choreic symptoms. The affection of the speech has disappeared, and the loss of power is much less marked. He is able to walk without support, and stands firmly on his legs. The mother says that improvement was noticeable within two days after the beginning of the treatment, and moreover that his condition is not as good as two days ago, since which time he has *not* taken the quinine. Treatment continued.

April 8th.—The patient is apparently well. There are no choreic movements, the speech is perfect, and the power in the extremities normal. The mother states that his condition has been equally good for the past two weeks.

Case II.—I. M. F——, female, aged 13. Brought to clinique, January 15th, 1876. There is a neurotic family history. The patient was in good health until five weeks ago, when disorderly movements of the left hand were first noticed, extending a little later to the lower extremity of the same side, and finally involving the left half of the face. There has been a gradual increase of these symptoms, with loss of power in the left upper and lower extremities, up to the present time. The speech has also become affected. There is no history of rheumatism.

Examination.—The patient is decidedly anæmic. There are marked choreic movements, with loss of power, in the above-mentioned situations. The speech is affected. The heart sounds are normal. The usual arsenical treatment adopted at the clinique was prescribed: *

Feb. 26th.—No improvement. The patient has complained for the past few days of feverish symptoms, which she has had at times for the past several months. The mother thinks that the choreic symptoms are decidedly worse every other day. Six grains of quinine, daily, were prescribed.

March 4th.—There is a decided improvement in all the symptoms. Treatment continued.

March 18th.—The patient is much better. The choreic movements have almost wholly disappeared. The strength of the left hand is nearly normal. The speech is perfect.

April 1st.—The patient is apparently well. The power in the affected portions is normal.

April 8th.—There has been no return of the trouble. Ordered ferri et quiniæ citra., gr. iij. ter in die.

Practical Medicine and Pathology.—At the recent meeting of the Faculty of the College of Physicians and Surgeons it was voted to discontinue the five series of four lectures each on special subjects, which have heretofore been delivered in the winter session, and to give the hour to the chair of Practice of Medicine and Pathology.

* Three minims of Fowler's solution, three times a day, to a child of three years and older, to be increased by one minim in each dose every third day, until the first symptoms of arsenical poisoning appear, or the disease begins to yield.

Reports of Hospitals.

BELLEVUE HOSPITAL.

Notes of Practice and Peculiarities of Treatment.

Peripheral paralysis, and paralysis due to cerebral lesion—differential diagnosis.

It has been said that in peripheral paralysis there is loss of Faradic excitability. The case seen, however, illustrated the fact that in certain mild cases there is not necessarily a loss of Faradic excitability. In severe cases, such loss may be complete.

A representative of the past—a case of mercurial stomatitis.

The case was utilized by every clinical teacher, as though it were a Chaldean inscription, and received as a compensation atropia, quinine, and chlorate of potash. Of the atropia $\frac{1}{100}$ to $\frac{1}{50}$ of a grain twice a a day, with from six to ten grains of quinine. The chlorate caused so much smarting that borax was substituted.

Facial erysipelas—notable absence of constitutional disturbance.

The inflammation in this case spread over the entire face and *ears*, which necessitated quite a severe attack, and yet the pulse at no time went above 80. The treatment embraced the use of quinine, tincture ferri, good diet, etc.

Acute articular rheumatism—hereditary transmission of the tendency thereto—cold bath—cardiac complications.

A male patient, æt. 21 years, reported that he suffered from his first attack of acute articular rheumatism when nine years of age, and that his mother suffered from repeated attacks of the same affection. The treatment in his case was essentially the alkaline. The question was raised whether there was any ground for supposing that the cold bath increased the liability to cardiac complications in this class of cases, and was answered in the negative.

Delayed sensation in a case of locomotor ataxia.

A male patient, æt. 42, first felt shooting pains from the spine around through the groin, which after a little time were followed by cramps and darting pains in the legs. Reflex excitability was pretty good, but was so delayed that when the sole of the left foot was pricked, five seconds elapsed before the man sung out, "oh!" and jerked his foot away; while with the right foot, four seconds elapsed.

Unusual manifestation of locomotor ataxia in its early stage.

The first symptom developed in the case before us was paralysis of the bladder. The retention of urine was first supposed to be due to stricture, but no stricture was found. It was then supposed to be owing to paralysis of the bladder, which was present, true enough, but it was only a symptom of the locomotor ataxia, which was soon developed in such a manner as to render the diagnosis unquestionable.

Pleurisy with effusion.—gangrene of the lung.—recovery from the gangrene.

There were items in this case which were interesting and of unusual occurrence. They were developed in

a male patient æt. 95, who first had an ordinary attack of sub-acute pleurisy. After a time, evidences of a cavity were developed upon the same side with the pleurisy, and more marked in front than behind, and the patient began to expectorate fetid and gangrenous material, which continued for about six weeks; at the expiration of that time the severity of these symptoms began to diminish, and finally the characteristic expectoration from a gangrenous lung ceased altogether.

The pleurisy remained, there being some fluid in the pleural cavity, and friction sound above it, although the symptoms of gangrene had disappeared. The treatment was mainly supporting.

A SIMPLE PLAN OF TREATMENT IN A CASE OF CHRONIC DIARRHŒA AND DYSENTERY.

The evidence of the chronic diarrhœa existed in the fact that food passed the bowels in almost the same condition it was introduced into the stomach. The dysentery was secondary to an acute attack, and had lasted for six months. A great variety of remedies had been employed by the patient before his admission to the hospital, but without permanent benefit. He was at once placed in bed, and fed upon milk and cod-liver oil, without medicine; and at the time of our visit he had suffered very much less than at any time since the occurrence of the acute attack. This plan of treatment was regarded as the better one, and a significant remark was that "drugs are unnecessary, when you can do all that can be done by means of rest, change in diet, etc."

PNEUMONIA—PLEURISY—PAUCITY OF RATIONAL SYMPTOMS—MARKED FALL OF TEMPERATURE—WAS THE FALL DUE TO QUININE OR TO THE NATURAL COURSE OF THE DISEASE?

A male patient æt. 38, intemperate; when admitted had been sick one week, and at the time of our visit was in the eighth or ninth day of a pneumonia, as diagnosticated by physical exploration. He was attacked on a Saturday with pain in the right shoulder, which soon extended into the right side and was sufficiently severe to disturb respiration. On the next day he had a chill, and that was the entire history of the case. On admission, the seventh day from the attack, his temperature was 104°F., whereupon thirty grains of the sulphate of quinine were administered, and the following day his temperature was 98⅘°F. The high temperature upon the day of admission was regarded as sufficient to exclude pleurisy, at least as the leading element in the case. The rational symptoms, however, rendered the diagnosis very uncertain. Upon physical examination there were found upon the right side of the chest posteriorly, increased vocal fremitus, dulness, perhaps flatness at the lower portion, bronchial breathing, broncophony, small and large-sized râles, and friction-sound just below where the bronchial breathing was most intense. Vesicular respiration was exaggerated and heard all the way down over the anterior portion of the chest upon the same side. It will be noticed that there was a marked fall in temperature after the administration of a large dose of quinine; and the question arose, was it due to the influence of the quinine? It was believed to be the result of the natural course of the disease, although it could be very easily ascribed to the influence of the drug.

A CASE OF TYPHOID FEVER—QUESTION REGARDING ITS ORIGIN.

The disease occurred in the person of one of the orderlies of the hospital, a man æt. 40 years, and, independent of any medication, was a very mild attack. The age of the patient was one point of interest, and another was the mildness of the attack in an individual of that age, although the symptoms were sufficiently well marked to render diagnosis positive. The important question, however, was: why should this man have typhoid fever? There was no way in which it could have been contracted through the medium of drinking-water. A case of typhoid fever occurred in the ward of which this man was orderly, but it occurred one month previous to his own attack, and was the only case of the disease with which he had come in contact during the season. As far as inference from facts could be drawn, a portion of the poison had entered his system, which had been developed in the body of the patient sick with typhoid fever in his ward one month previously. As far as examination had extended, no defect in the soil-pipes connected with the ward has been found.

AN ACCESSORY PHYSICAL SIGN OF PHTHISIS—A POINT WITH REFERENCE TO INSURANCE POLICIES.

There was heard in the phthisical patient before us, a systolic subclavian murmur upon the right side. When this murmur is found upon the right side it possesses in conjunction with other physical signs of phthisis, a certain value as accessory evidence. A subclavian murmur upon the left side is natural to certain persons, and possesses no importance as a physical sign of disease. This is a point of practical importance in the examination of candidates for insurance policies.

CERTAIN ITEMS IN CONNECTION WITH NINE CASES OF ACUTE ARTICULAR RHEUMATISM.

There were four males and five females. In two-thirds of these cases, no treatment had been adopted before admission. In all the cases, the urine was rendered alkaline within twelve hours after admission. In none of the cases was a cardiac murmur developed under observation. In none of the cases was pericarditis developed.

THE THERMOSCOPE AND THE SURFACE THERMOMETER.

There was a lump on the neck of a child, and the question arose whether any elevation of temperature was present. A surface thermometer was used and reported 93° F. on both sides. A thermoscope was used, and it indicated very plainly that in the lump and the tissues surrounding it, there was marked elevation of temperature.

Progress of Medical Science.

SEPARATION AND DESTRUCTION OF THE PANCREAS, AFTER PERFORATION OF THE STOMACH BY ROUND ULCERS.—The following unusual pathological conditions are reported by Dr. Hanns Chiari, of Vienna, as found at the autopsy of a woman of intemperate habits, fifty-four years of age, the immediate cause of death being a fatty degeneration of the heart. The most important and interesting concerned the stomach primarily. The posterior wall of this organ was the seat of two round ulcers the size of strawberries, through which a communication was established between the cavity of the stomach and the sac of the omentum, the latter constituting a sizable suppurating cavity, the contents of which were prevented from escaping into the peritoneal

sac, by intimate adhesion of the margins of the foramen of Winslow. The lower wall of this sac was in places adherent to loops of the jejunum, and there were openings into this part of the intestine. In this sac, together with other broken-down tissues, was found a mass nearly five inches in length, and entirely separated from all other parts. This, on examination, proved to be all that was left of the pancreas. The author considers the ulceration of the coats of the stomach to have been the first step in the morbid process.—*Wiener med. Woch.* March 25, 1876.

On the Relation between Phosphoric Acid and Nitrogen in the Urine.—We quote, from Dr. W. Zuelzer, of Berlin, the following brief summing up of his own conclusions on the subject. In support of them, he furnishes very numerous tables of comparison and observations of the action of various remedies and in various diseases. 1. The relations between phosphoric acid and nitrogen in the urine is under normal circumstances constant, but when subject to different influences, variable. 2. The fluctuations in this relation are characteristic of the periods of advance and decrease of the conversion of tissue in the nervous substance. 3. The general metamorphosis of tissue (of the "flesh") is dependent upon the nervous activity.—*Virchow's Archiv.*, March 28, 1876.

On Parasitic Growths in the Human Lung.—Dr. Paul Fürbringer, of Heidelberg, has arrived at the following conclusions regarding the growth of fungi in the lungs. 1. Their seat is only in diseased portions of the parenchyma, and they are to be regarded as a secondary affection. 2. Stagnating blood, and the products of its decomposition, furnish a favorable soil for the development of fungi. 3. Acute affections of the lungs, occurring in those of healthy constitutions, exclude these growth, while the opposite conditions of chronicity and cachexia favor it. 4. The presence of putrid decomposition appears to prevent the formation of mould-fungus, while that of the schizomycetes, especially bacteria, goes on. 5. The clinical diagnosis of this condition will depend upon the discovery of the germs of the fungus in recently expectorated sputa.—*Virchow's Archiv.*, March 28, 1876.

Watson's Operation.—Some two years ago Dr. Patrick H. Watson, of the Royal Infirmary of Edinburgh, reported the history of an operation which he called "Excision of the Anterior Tarsus and base of the Metatarsus." The operation consists in cutting into the foot upon the inside and upon the outside, dissecting the tissues from the dorsal, and from the plantar surface, and by disarticulating and the use of the saw removing the affected bones in mass. After the operation, and before removing the tourniquet, the entire wound is plugged firmly and securely by means of pledgets of lint, passed through and through the gap in the foot, and laid in closely one upon the back of the other, so as to completely fill up the aperture; and at the same time so closely crowded together as to secure, when pressure is applied from the outside by other pads supported by a bandage, that no bleeding takes place. Dr. W. W. Dawson, of Ohio, gives an account of a similar operation which he performed on a little girl of seven years. Eighteen months previous to the operation, she was struck on the dorsum of the foot by a broom-stick. The blow did not seem to be a hard one, but violent inflammation followed it, involving first the soft structures, and passing thence to the tarsus. After a time the superficial inflammation upon the dorsum of the foot disappeared, but the ostitis remained, together with great thickening of the soft tissues of the plantar surface. When first seen by Dr. Dawson, three months previous to the operation, there was a circumscribed abscess on the inner border of the foot. On the floor of this abscess the tarsus was found to be in a carious condition. Another abscess was formed to the distal side of the first; and after this was opened, the junction between the tarsus and metatarsus was found involved in the disease. Dr. Dawson considered this a fair case for the tunnelling operation suggested by Dr. Watson. In preparing the limb for the operation, the tourniquet was not used, but Esmarch's bloodless apparatus was applied. Dr. Watson used the saw from below upwards, Dr. Dawson reversed this, the advantage being apparent; for, after the disarticulation, the foot being loosened at the medio-tarsal articulation, it can be so bent upwards as to lessen the tension of the dorsal tendons to such a degree, that the saw can be introduced and used with much greater ease. Dr. Dawson, instead of introducing layer after layer of lint, until the tunnel was completely filled up, rolled a piece of lint large enough to fill the opening, and introduced it at once. The result of the operation was most satisfactory. The parts seemed completely solidified, and with a shortened foot, the patient walked without a limp. The advantages of this operation over the dorsal incision, Dr. Dawson thinks are very marked. By it, wounding vessels and tendons, and everything in fact on the dorsum of the foot, are avoided.—*The American Medical Weekly, January* 29, 1876.

The Median Operation for Stone in the Bladder.—Mr. Joseph Hunt gives the history of twenty cases of stone in the bladder removed by the median operation at the Leicester Infirmary. Only one of these cases ended fatally, and then death resulted from pyæmia, though it is true thirteen of the cases were under the twelfth year. Of eighteen cases, the average number of days from the date of the operation, to the time of recovery was thirty-six. In the fourteen cases in which the record was kept of the time at which the urine first came, per urethram, the average was on the fifth day. These cases are interesting, from the fact that the median operation has been almost wholly discarded at the London hospitals, though at the Leicester Infirmary a long and patient trial of the two methods has lead to the adoption of the median in every case. In one of the cases there was secondary hemorrhage after a free incision of the prostate.—*The Lancet*, March 18, 1876.

Kava-Kava, a Remedy for Gonorrhœa.—An infusion of the root of the kava-kava (*Piper methysticum*) has long been a popular remedy for gonorrhœa in the Pacific islands. Three or four scruples, or even more, of the grated root are macerated for five minutes in two pints of water, the whole being frequently shaken up. This water after filtration is given in two doses during the day, before or after meals, and repeated every day until a cure is effected. Twenty minutes after the first dose, a pressing desire to urinate is experienced. The quantity of urine is abundant, and it becomes limpid and as clear almost as water. The pain that was present during the previous micturitions disappears, and a sensation of comfort is experienced in urinating. A cure requires ten or twelve days. The kava, moreover, acts like a bitter tonic. It is pleasant to take, stimulates the appetite, does not derange the digestive functions, and produces neither diarrhœa nor constipation.—*Gazette Médicale de Paris*, April 1.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, May 20, 1876.

THE ENGLISH DEBATE UPON THE PATHOLOGY OF SYPHILIS.

We have watched with much interest the progress of the debate upon the pathology of syphilis, which has occupied four sessions of the Pathological Society of London. Considering the exceptional importance of the subject, and also the high position of some of the speakers thereon, we thought it due to our readers to present them with a condensed outline of the leading paper, and of the replies evoked by it. We certainly think that the council of the society showed good judgment in selecting Mr. Jonathan Hutchinson as the person to open the debate, and further, that he has in the main performed his task well. At the outset, however, we must express our disapproval of the statement so emphatically made at the commencement of the paper, in which Mr. Hutchinson says: "I think we may say of dualism that it is dead, and that the now simpler creed which attributes the soft chancre to contagion with inflammatory products produced by syphilis, but not as a rule containing its germs, is the one which obtains general acceptance. We have, then, in syphilis, but one malady and one virus." We think this statement is for various reasons ill-judged. As dualism is not one of the distinct issues of his paper, he should not thus curtly allude to it and dismiss it, as by so doing he opened the way to irrelevant discussion, and at the same time rendered himself liable to mislead those who are not familiar with the minute aspects of the question. Clinically, to-day, the fact that the hard sore always produces syphilis, and that the soft sore does not, but that it is simply local in its operation, is as generally received and as susceptible of overwhelmingly convincing proof, as it was when it was so boldly advocated by Bassereau twenty-odd years ago; and the fact, or rather the statement, that this local or soft sore is related more or less remotely with syphilitic inflammatory processes, while in a measure it modifies the dualistic view in a theoretical way, has no practical effect upon it,—certainly it does not demolish it. Hence we think that the allusion made by Mr. Hutchinson was ill-judged and misleading in its effect, particularly so if his words are carefully weighed; for he says that the soft sore may not, as a rule, contain syphilitic germs; the inference is plain that sometimes then it may, when, of course, syphilis would follow. We judge from the whole tenor of his remarks that he does not really think that this is the case. As is well known, Mr. Hutchinson has been one of the most ardent advocates of the view that syphilis is a specific fever, having definite stages, with periods of incubation, and of the outbreak of the efflorescences or exanthems, followed by sequelæ, which are generally called tertiary lesions. These opinions he here reiterates, and devotes much space to prove that tertiary lesions are not direct effects of the disease, but rather results or sequelæ of it. His argument in support of this opinion, which by the way was severely criticised, is that in the early stages of syphilis the manifestations are general and symmetrical, thus proving, he thinks, that it is then a blood disease; but that after a greater or less lapse of time, they are unsymmetrically developed, which fact goes to prove that they are not any longer manifestations of a blood disease, but on the contrary, as we have said, sequelæ of it. He thinks that the same feature is observed in the course of the exanthemata. Mr. Hutchinson thus expresses himself: "In all probability syphilis ceases to be a blood disease at the date when symmetrical manifestations cease to be usual. This period varies according to the treatment adopted and the idiosyncrasy of the patient." As to the date at which syphilis is no longer contagious, Mr. Hutchinson truly says that negative evidence goes to prove that this is the case in the tertiary period, and adds that the power of hereditary transmission may remain long after this cessation. Practically, this point is of great importance. As instances of the local lesions or sequelæ, the author cites the relapsing affections of the tongue and skin, and thinks that the fact that these are amenable to local treatment is in a measure proof that they are not real manifestations of the disease. He further suggests that perhaps local treatment would also cure the internal gummata, if they were likewise accessible. He does not think that Lancereaux simplifies the question of periods by calling the tertiary stage the period of gummy deposits, as such are sometimes found even in the secondary stage. He admits that these secondary gummata are not dissimilar from those of the later period. This opinion appears very singular, when compared with the statement that tertiary gummata are sequelæ.

He then considers the peculiarities of syphilitic inflammations, and the relation of the various lesions

histologically the one to the other, which he considers very intimate. In the first category he calls attention to the immunity generally possessed by syphilitic growths to suppuration, and at some length speaks of their tendency to produce phagedena and sloughing, as well as in some instances to undergo interstitial absorption. As to syphilis being the cause of phagedena, he expresses himself more strongly than any authority with whom we are familiar, as he says: "So marked is the liability to phagedena in syphilis, and so rare in connection with any other cause, that, with few exceptions, we may count syphilis either directly or indirectly as the parent of all phagedena." Reverting again to that still unsettled question, the periods of syphilis, Mr. Hutchinson very forcibly states that attempts to found a division of the secondary and tertiary stages by a tendency or otherwise to deep ulceration only add confusion to the subject. We think, however, that he fails to make clear his position as to the distinctly marked differences in these periods. His chief reliance is upon the symmetry of the secondary stage, and the absence thereof in the tertiary. He carries this idea to the extent of saying that if rupia is symmetrically developed it is a secondary manifestation, while if not symmetrical it is tertiary, there being no peculiarity of the lesion to settle the question. Though in some instances this may be true, there are so many exceptions to the statement that it should not be unreservedly received. In speaking of symmetry and asymmetry of eruptions, Mr. H. makes a remark which is certainly at variance with his position, that it is a *question* of *abundance* rather than of character, which really means that in the secondary stage the infiltrations are copious, and scanty in the tertiary. Finally, as regards differences between secondary and tertiary lesions, he states that the former undergo spontaneous resolution, while as a rule the latter do not. Foreseeing that it may be urged that in the secondary period the more superficial tissues are the ones generally involved, and then only in a superficial way; and that in the tertiary stage deep ulceration takes place and deep tissues are involved—says he can only admit, with great limitation, these assertions, as the ulcerative processes are often severe in the secondary stage; and that we do not know definitely that the viscera are not involved in the secondary period. This leads him to offer a suggestion of much practical value, namely, the necessity for study of the effect of syphilis in its early or secondary stage upon the viscera. He clearly shows, by numerous examples, that in this stage other tissues than the more superficial ones are affected. This portion of the paper is both interesting and suggestive. Further, he advances the hypothesis that tertiary lesions may really be only the result of secondary ones, they developing themselves in tissues upon which secondary lesions have stamped a morbid impress. This suggestion is worthy of attention, though abundant evidence can be cited against it. It is, as Mr. H. says, different from the theory advanced by Virchow, that tertiary lesions and relapses are due to the syphilitic poison stored away in lymphatic glands, and from them bursting forth and thus involving blood and tissues. Passing, then, to the consideration of hereditary syphilis, he sketches in a general way its course, and alludes to its more prominent features. He thinks that in this form we do not, as a rule, meet the well-marked tertiary lesions of the acquired variety, such as cellular tissue gummata and lesions of the muscles and tongue. In children we have less frequently nervous phenomena than in adults; and in them is to be observed, as a rule, a more marked limitation of the disease; so that, although a child may suffer for years with lesions of inherited syphilis, its future life will usually be free from syphilitic manifestations. Mr. Hutchinson is very explicit in his statements as to the relation of syphilis and scrofula, and thinks that the manifestations of both conditions are markedly distinct the one from the other, and that they possess no pathological relation with one another. We must express our surprise that Mr. H. does not acknowledge that syphilis may act as a predisposing cause to the production of scrofula. To our surprise he, we think unnecessarily, considers the relations between lupus and syphilis, but very properly concludes that none exist. The paper ends with a grateful acknowledgment of the labors of the various living observers upon syphilis. In our next we shall give a synopsis of the views of the gentlemen which were called forth by the opening of Mr. Hutchinson..

HOMŒOPATHY IN THE UNIVERSITY OF MICHIGAN.

The State Society of Michigan, at a recent meeting, and after an exciting debate, adopted a resolution condemning the course of the faculty in regard to the homœopathic question. An amendment was offered to the Constitution, which, under the rules, was laid over until the next annual meeting, refusing fellowship to any graduate of the University while the present arrangement continues. Amid the excitement attending those proceedings, the Society adjourned, with much of its important business unfinished.

Every one interested in the proper solution of the matters in dispute will be sorry that such radical measures have been adopted, and that such a spirit of partisan zeal has controlled the deliberations of a strictly scientific body. Nothing can show more clearly that the Michigan State Society is absurdly intolerant of homœopathy than the recent action alluded to. The extreme attitude assumed is of itself a confession of weakness, an attempt to force conviction by arbitrary means, rather than a manly and fearless endeavor to meet the questions at issue, and discuss them with the calmness of men who desire to know

the truth, the whole truth, and nothing but the truth. If we are ever going to expose the error of homœopathy we must give it plenty of light and air. We have dignified it with martyrdom long enough. If we are not afraid of it we can afford to offer it every opportunity for proving its superiority. The faculty of the University, in view of the issue at stake, should be upheld rather than condemned. The idea of yielding up the school to the homœopaths is preposterous. The liberality of conceding the homœopaths even what they have, will afford them the surer means of working out their own destruction.

Homœopathy is a rank weed that has always flourished in the low and damp recesses of hypocrisy, and we have fostered this tendency by shadowing it with our prejudices. The longer we do this, the stronger will be its growth, and the more effectually will it entwine with the ignorance of the masses. If, on the contrary, we give it the impartial sunlight of truth, it must sooner or later shrivel into the infinitesimal proportions of its own doctrines. We, at least, are willing to give it such a chance. It never can be done, however, by any such resolutions as were passed by the Michigan State Society.

THE SHORT TERM SYSTEM.

Dr. Gaillard calls our attention, in a recent number of his journal, to what he terms "surprising blunders" on our part, in stigmatizing the short term system of medical study in Louisville as "corruption in high places," etc., whereby "the readers of the 'Record' have been induced to believe that the terrible conditions indicated really exist."—We are not sorry that we have conveyed such an impression, as we intended to do so. We believe that such a state of things as graduating a student in nine months does exist in Louisville; and, in view of our opinion, as to what a medical education should be, we are forced to repeat that the system is a "monstrous evil" and should be checked at once. We do not care what College endorses the practice, or what journal advocates it, we still say it is wrong; that it is an evidence of "corruption in high places," and that it is an abuse of the diploma-granting privilege. Dr. Gaillard, in his defence of this cramming system, asks the question: "Has the time not come when qualifications should be the test for graduation, and not time?" One is such a necessary condition of the other that they cannot be separated. It is, to our way of thinking, such an impossible thing for the most brilliant intellect under the best possible training, to digest even the rudiments of medical science within nine months, that we are quite willing to give the element of time between meals, very serious consideration.

The next meeting of the American Medical Association will be held in Philadelphia, on Tuesday, May 6th, 1876, at 11 A.M.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, April 26, 1876.

Dr. Chas. K. Briddon, President, in the Chair.

FISH-BONE REMOVED FROM PHARYNX BY PARACHUTE PROBANG.

Dr. Lewis A. Sayre presented several specimens of exsection for morbus coxarius, previous to which, however, he exhibited the shoulder of a codfish which had been extracted from the pharynx of a lady, by his son, Dr. Charles Sayre, by means of the œsophageal parachute probang. The patient was suffering intensely, and was in the agony of impending suffocation, when the prompt introduction of the instrument and the extraction of the foreign body gave her instant relief.

EIGHT ADDITIONAL CASES OF EXSECTION FOR MORBUS COXARIUS, MAKING SIXTY-ONE IN ALL.

Dr. Sayre, in presenting these cases, stated that he did so for the purpose of placing them upon record in their order. The first specimen, consisting of the head and neck of femur, with portions of the acetabulum, was numbered 54, and had the following history:

Case 54.—Charles Braman, aged 4. Born of healthy parents. Was first noticed to be lame in March, 1873. Knows of no fall or other injury. Child very greatly emaciated; very anæmic; profuse discharge from three openings above Poupart's ligament, and another upon outer part of thigh.

Exsected March 28, 1875.—Head and neck absorbed; upper end of shaft of femur covered with a thick involucrum. Femur black and necrosed, and sawed off just below trochanter minor; the disease having progressed farther down upon the inner side of the femur, another section was made a quarter of an inch lower. A loose piece of bone, about the size of an almond, was picked out of the acetabulum, giving exit to a large quantity of pus of a fecal odor, which had been imprisoned behind the ilium, and had caused the sinuses above Poupart's ligament.

Dressed in usual way and placed in wire cuirass. The dressings were not touched for two days, when the oakum was removed from around the hip, the wounds cleansed, and the dressings reapplied.

June 13, 1875.—Child has been very comfortable since the operation. The sinuses above Poupart's ligament have almost closed. Removed from wire cuirass, and long extension splint with abducting screw applied.

January 1, 1876.—Can stand on the leg when splint is removed, and walk with it on. Considerable motion at joint. Slight discharge from sinus on posterior part of ilium. Condition seen in photograph taken in December, 1875.

Case 55.—John F. Drum, 5 years old. Healthy parents. Stout boy until 30 months ago, when he fell and struck his knee upon the stones in the street. Has been blistered repeatedly. Very much reduced. Limb in position of third stage. Large abscess over trochanter major, which was opened by a free incision, discharging a large quantity of pus, and exposing a rough and necrosed trochanter.

Exsected April 31, 1875.—Head partly absorbed, and a piece of it lying loose in the acetabulum. Neck and part of shaft of femur absorbed. Aceta-

bulum perforated. Femur sawed below trochanter minor. Two pieces of bone removed from acetabulum. Child was placed in cuirass and removed at once to Jersey City, by Dr L. J. Gordon, under whose care he has been ever since.

February 2, 1876.—Child was seen to-day for the second time since the operation. Sinuses entirely closed. Has considerable motion at hip. Can stand upon leg without pain when the splint is removed.

Case 56.—Bridget D. Smith, aged six. Born of healthy parents. Several brothers and sisters, all remarkably healthy. Has been lame since February, 1872. Knows of no injury, although she has had repeated falls, having been a very active child. Has been blistered repeatedly without relief. Child is very much reduced, and very anæmic. Leg shortened, adducted, and fixed. Two sinuses on anterior part of thigh leading to dead bone and discharging freely.

Exsected March 31, 1875, *at Bellevue Hospital Medical College.*—Head absorbed, also greater part of neck. Femur sawed just below trochanter minor. A second section was made about one-quarter inch lower down. Several pieces of bone removed from acetabulum which was perforated by a hole about the size of a small penny. Sinuses slit up, scraped, and filled with Peruvian balsam; wound dressed in usual way, and child placed in cuirass, and taken home to Forsyth street.

Child continued to improve, had no constitutional disturbance, and was removed from cuirass and placed upon long splint. Condition is seen in photograph taken August, 1875.

Case 57.—Ellen Sullivan, aged five years. No history of the cause of the disease or its duration could be obtained in this case, as the child's father was dead and her mother in the lunatic asylum. Her limb was in the position of the third stage of morbus coxarius and partially anchylosed. Several sinuses on outer and posterior surface of thigh led to dead bone. Child was pale and very thin.

Exsected September 22, 1875, *at Bellevue Hospital.*—Head nearly absorbed, a small piece of it lying loose in the acetabulum. Femur sawed off just above trochanter minor. Acetabulum perforated, and plugged by remains of head. Large quantity of pus retained behind the ilium, which was evacuated when loose; piece of head was removed. Sinuses on thigh scraped and filled with Peruvian balsam. Child dressed in wire cuirass.

November 18.—Has been quite comfortable since operation. Has gained considerable flesh, and has quite rosy cheeks. Removed from cuirass and applied long splint with abducting and everting screws.

February 2.—Child has been walking around the ward since the splint was applied. Sinuses nearly closed, discharges very much diminished. Short hip splint applied in place of long one.

Case 58.—Rosa Mullins, aged three years. Parents both healthy. Two other children both very healthy. Said to have had a fall, but no positive information could be obtained. Disease first noticed after a severe illness in summer of 1874. An abscess on posterior part of thigh was opened in June, 1875, and still continues to discharge freely.

Child very small, white, and emaciated. Abdomen distended. Limb adducted, shortened, and fixed.

Exsected September 29, 1875.—Head, neck, and part of great trochanter entirely absorbed; acetabulum perforated. Three small pieces of bone picked out of acetabulum. Wound stitched and dressed with oakum and Peruvian balsam. Child placed in wire cuirass.

December 13 1875.—Short hip-splint applied.

Case 59.—Mary Mahony, aged seven. Two and a half years ago jumped from a high stoop, and immediately afterwards complained of pain in hip. This gradually passed off. Three months afterwards had sharp pain at night. Was then seen by a physician, who diagnosticated hip disease in second stage, and applied short splint. This was worn for three months with great comfort; at the end of this time child was taken with scarlet fever, and the splint was removed and never reapplied.

Child gradually grew worse, and was admitted to Bellevue Hospital March 29, 1875, in the following condition:

Limb adducted, flexed, and fixed. Several sinuses around right hip. Considerably emaciated and anæmic. Probe touches dead bone. Exsected December 15, 1875. Head partly absorbed. Femur sawn just below trochanter minor; a second section was made nearly half an inch lower down, as the bone was farther diseased.

February 2, 1876.—Child removed from cuirass and placed in long splints.

Case 60.—Charles Pixlee, aged nine. Patient's mother died of phthisis. Patient has never been a strong healthy boy. Three and a half years before admission to Bellevue Hospital his father noticed that he walked lame. No cause known. Was sent to boarding-school, where he was obliged to go up and down several flights of stairs during the day. Grew worse, and was put to bed and extension by weight and pulley applied. Two months after short splint applied, worn with comfort for several months, when the physician in charge was taken sick. The splint was then removed, and the child gradually grew worse.

Admitted to Bellevue Hospital in the following condition: "Is a very delicate child and reduced almost to a skeleton. Suffers intense pain when he is moved or touched. Right leg flexed at hip and knee joints. Sinus in upper and anterior part of thigh, bed-sore over sacrum. Abscess over right anterior superior spinous process. Albumen in considerable quantities in the urine. Symptoms of waxy liver.

Exsected February 2, 1876.—Head partly absorbed. Acetabulum perforated, and neck of femur caught in the opening, rendering luxation impossible. Femur sawed below trochanter minor. Some hemorrhage from artery in thickened involucrum, controlled by oakum compress.

Child placed in cuirass, but removed at the end of a few days, and placed on air-bed, with right-angled splint upon well side.

Died, April 19, 1876, from exhaustion. Liver, spleen, and both kidneys markedly waxy, responding to iodine test. Liver very much enlarged, weight three and three-quarter pounds. Heart and lungs normal.

Case 61.—Charles Smith, aged eight. Caused by frequent falls, as the boy was continually tripping. Has always been a stout, healthy boy.

Five fistulous openings, one of them in the groin. Very much run down from want of proper food and good air.

Exsected April 5, 1876.—Head and neck absorbed, and end of femur thrust through the acetabulum. Bone sawed through and removed by forceps. Acetabulum extensively necrosed. Several pieces of bone removed from acetabulum. Larger abscess between ilium and internal periosteum.

The specimens belonging to the different cases were exhibited to the Society. Dr. Sayre, in connection with these cases, took occasion to refer to the following statement from a recent English work entitled: "Diseases of the Hip, Knee, and Joints, and their

Treatment by a New and Efficient Method," by Hugh Owen Thomas. On page 6, Mr. Thomas says: "Since the visit of Dr. Sayre to England, and the exposition of his method to the London surgeons, I have seen several instances in which his apparatus was skilfully applied, and from personal knowledge I am satisfied that in not one of these cases was the disease benefited or even arrested. The best commentary upon this method is the remarkable frequency with which its principal advocate has had to perform excision."

DR. SAYRE, in reply to this assertion, stated that he never had occasion to exsect a hip joint in any case that came to him in the first and second stages of the disease, but had seen hundreds of the latter recover without deformity, and with perfect motion. The cases in which exsections had been performed were almost *in articulo mortis* at the time of the operation.

THE EFFECT OF OPERATION ON ARRESTING WAXY DEGENERATION.

DR. MASON asked how many of his (Sayre's) cases died within the first year after the operation.

DR. SAYRE could not say positively in the absence of his records, but believed the number to be eight, all but three of which were complicated.

DR. MASON was certain that in the majority of the cases amyloid degeneration existed at the time of the operation, and it was a matter of some importance to ascertain what effect such an operation might have in arresting the waxy change in the internal organs by the removal of the exciting cause. In this connection he referred to a case which was operated upon by Dr. Sayre two or three years ago, in which there was extensive waxy degeneration of liver and kidneys, and which recovered.

DR. SAYRE stated that the particular case alluded to was reported to the Society in 1873 (*vide* MEDICAL RECORD, vol. viii., p. 460). The patient was a male, 11 years of age, who was dying of waxy degeneration, the result of suppurative hip disease, and the operation was performed more on account of the boy's constant importunity than for any hope of benefiting. Strange to say, however, after the operation the patient began to improve in all his symptoms, and enjoyed two years and four months of perfect health, the albumen and casts finally disappearing. His death was the result of an attack of acute nephritis, the result of an exposure to cold. No autopsy was attainable.

DR. GEDNEY remarked that, as a matter of clinical experience, he had often noticed a direct relation between the quantity of a chronic suppurative discharge and the size of the internal organs which were the subjects of fatty degeneration. For instance, when there was an interruption in the discharge, there was a corresponding diminution in the size of the liver and in the quantity of albumen in the urine, and *vice versa*.

DR. KNAPP stated that in the present state of our knowledge it was impossible to say what would be the duration of amyloid degeneration. In this connection he referred to a case of amyloid degeneration of the choroid presented to the Society in June, 1873, and which he had seen only a few days ago in apparently perfect health. In that case the degeneration was confined to the arteries of the choroid (MED. REC. vol. viii., p. 547).

EPULIS OF LOWER JAW.

DR. ROBINSON presented a specimen of the above with the following history:—J. P., German woman, aged 44 years; does housework; eighteen years in the United States; has had eight children—five living all healthy; she has always been perfectly well; came under my care one month since. About three years ago noticed a tumefaction of the gums at the left of the median line of the lower jaw; the swelling increased very slowly until beginning of last pregnancy—two and one-half years ago—when it took on a more rapid growth. During her period of pregnancy it increased rapidly and reached its present size—that of a cherry. Since birth of last child, nine months ago, it has not augmented. It has rarely been painful, and has more particularly caused her mechanical trouble by its presence interfering somewhat with the closing of her jaws, and consequently with mastication. In wet weather she has remarked that the tumor becomes somewhat sensitive.

The tumor presented the aspect of a small globular mass about the size of a cherry. It is tolerably smooth, of a rosy color, very consistent, and not at all pulsating to the touch. It adheres by a broad base or pedicle, to the periosteum of the alveolus of the left lateral incisor tooth of the lower jaw. It is not adherent, apparently, to the bony structure of the jaw, and is somewhat movable upon its base. When moved from side to side there is a little bleeding about its base, seemingly brought on by an ulcerative process, caused by the neighboring teeth, which it has pushed aside by its own pressure in growing. It is difficult to say positively whether the incisor tooth at the seat of the growth is incorporated with it. The patient thinks so, as she does not remember having lost a tooth at this region. The teeth of the patient are generally defective, and she has already lost several.

About three weeks ago he excised this tumor. At first I attempted to dissect it away from the gums by means of the bistoury. In this I failed, as it was of too hard consistence. I therefore used the bone forceps, cutting down on either side of it, until I had penetrated nearly to the base of the alveolus, and then by means of a gouge-shaped dental forceps tearing away tumor with a small portion of bone. By way of precaution against return of growth, I was compelled to extract one incisor tooth, and after the operation was terminated and the bleeding arrested I cauterized the base with nitrate of silver.

Upon section the tumor presented a tolerably homogeneous structure to the naked eye, and was apparently largely made up of fibrous tissue. There was no tooth enclosed in its tissue. The microscope shows it to be a so-called fibro-plastic tumor, or spindle-celled sarcoma.

One of the points of interest in the case had reference to the liability of return. In the instance in question the glands in the neighborhood, as Dr. R. believed was usual in cases of pure sarcomatous tumors, were not involved. He thought from a chemical point of view it was of importance to note the fact of the freedom of glandular infiltration, as bearing upon non-malignancy.

DR. BRIDDON had seen two or three similar cases with no glandular complication. Dr. MASON had seen but one growth of the kind return, and that was in the course of four months from the time of the operation. One case he had operated on ten years ago, without any return of the disease. Dr CROSBY referred to one case in his practice, in which the tumor was simply removed from the periosteum and in which the disease returned within a month. At the next operation a portion of the bone was removed with the tumor, since which time, three years ago, there had been no return.

THE CHEMUNG COUNTY MEDICAL SOCIETY, N. Y.

Fortieth Anniversary.

RECOVERY FROM TRAUMATIC TETANUS—TYPHOID FEVER AND HEMORRHAGE FROM MAMMARY GLAND—INVERSION OF UTERUS—TANSY POISONING—CONGENITAL RECTO-VAGINAL FISTULA—THE HYPODERMIC SYRINGE AS AN ASPIRATOR IN STRANGULATED HERNIA—OPIUM POISONING—THE CARE OF THE INSANE—COMPLETE RUPTURE OF URETHRA.

This Society held its Fortieth Anniversary in the city of Elmira, N. Y., on the 21st of March, 1876. S. W. Bailey, M.D., President, in the Chair. The following is a synopsis of some of the papers read:

TRAUMATIC TETANUS—RECOVERY.

Reported by P. H. Flood, M.D., of Elmira, L. Y., lad of nineteen years; railroad injury, Dec. 27th, 1875, calling for amputation of the great toe, and the two adjoining toes, of the left foot. A physician was called, who performed the operation, apparently with the object of saving as much of the toes as possible, as there was very little integumentary covering for the end of the bones. From this time till the 15th of January he was about the house on crutches, apparently very comfortable; appetite good. On the 19th (twenty-three days from the date of the injury), after four days of premonitory symptoms, he was attacked with *tetanic spasms*, the muscles becoming rigid, and the whole body stiff and straight. The muscles of the neck and jaw were chiefly affected, producing trismus, or lock-jaw. Seventy-five drops of laudanum were given, and morphine hypodermically for two days, with but little effect. Change of physicians then took place. At this time the patient's condition was calculated to excite feelings of the deepest compassion. He was lying upon his back, his head drawn backward and fixed by rigid contraction of the muscles of the neck, the jaws firmly set, the skin of the forehead wrinkled, the eyes rigidly fixed, and sunken in their sockets, the pupils being dilated. The angles of the mouth were drawn down, exposing the teeth, firmly clenched, and an occasional twitching of the mimic muscles, and oozing of blood from the mouth, added to the shocking appearance. The whole body was rigid and frequently convulsed, the patient screaming with remittent pains, and drenched with perspiration. Pulse weak and small; 120 per minute. The paroxysms were of variable duration, sometimes quite brief, and at other times continuing from a quarter to half an hour, being easily provoked by the shutting of a door, the noise of a stove, barking of a dog, etc.

Upon examination of the wounds of the foot at this time, they were found to be dressed with simple cerate, that of the great toe being nearly healed. The two lesser toes were enlarged, swollen, covered with fungous growths, and discharging freely, the odor being extremely offensive.

A soft poultice was substituted for the cerate. Absolute quietude and freedom from all exciting causes, both physical and mental. Fifteen drops of the tincture of aconite leaves injected hypodermically. This seemed slightly to relax the tetanic spasms. On the evening of the same day (Jan. 23) the injection, fifteen drops of the tincture of aconite, was repeated.

Jan. 24th, 9 A.M.—Found patient much the same as previous evening. Spasms continue, but with less severity. Hypodermic injection of Magendie's solution of morphine, thirty drops, with tinct. of aconite leaves, thirty drops. One hour after this administration the patient experienced decided relief; spasms not so severe or frequent. 9 o'clock, P. M.—Patient has remained about the same during the day. About half an hour ago spasms became more severe, with increased rigidity and pains. Repeated the medicine, same as in the morning; morphine 30 drops, tinct. aconite 30 drops. Half an hour after this he began to improve. Pulse, 120, irregular, weak and feeble; profuse perspiration; could open his mouth; drank some whey, beef tea and cream.

Jan. 25th, 9 o'clock A. M.—Patient comparatively comfortable during the night; sleepy, but did not sleep; effects of the medicine commencing to disappear; spasms continue same as day previous. Repeated the injection, which produced almost immediate relief; could extend his tongue; found it bitten and swelled; continue beef-tea and cream. nine o'clock P. M., patient quite comfortable; spasms at longer intervals, and less intense. Continue hypodermic injection as usual; move the bowels with enema; diet the same.

Jan. 26th, 9 A.M.—Patient better; had occasional spasms during the night, but towards morning ceased entirely. Severe pain in hips and back; very sore, stiff and rigid. Continue the hypodermic injection as usual. 9 o'clock P. M.—Patient comfortable during the day; took nourishment, beef-tea and cream.

Jan. 27th, 9 A. M.—Patient comfortable; slept fifteen minutes during the night. 28th, comfortable, but no sleep. 29th, much the same, slept half an hour. 30th, Gave an enema, profuse perspiration; pulse feeble and frequent. 31st, slept an hour at a time. Feb. 1st.—Patient appears better this morning; sleept good during the night; still complains of pain and soreness in back and hips; moved limbs for first time in fourteen days. Feb. 2d—Slept good; turns over in bed. Feb. 3d.—Still improving; slept soundly.

Feb. 4th.—Appetite increasing; soreness and stiffness disappearing, unable to bend forward, even with assistance; pupils still dilated; can partially open the mouth; pulse stronger and not so frequent. The medicine has been continued every twelve hours in the same dose (morphine 30 drops, tinct. aconite 30 drops). The patient was, at length, fully restored to health, under this treatment.

TYPHOID FEVER ATTENDED WITH HEMORRHAGE FROM THE MAMMARY GLAND.

Case reported by Dr. Wm. H. Davis, of Horseheads. This case was peculiar, with respect to the source of the hemorrage. Death was the result.

Dr. Louis Velder, of Elmira, read a paper entitled: "A Case of Puerperal Convulsions, complicated with acute Bronchial Catarrh, followed by Œdema of the Lungs. Fatal Termination."

INVERSION OF UTERUS.

Dr. H. S. Chubbuck, of Elmira, reported a case of inversion of the uterus. Mrs. J. K., aged 27 years, confined with first child Dec. 3, 1874. Duration of labor twelve hours; very severe for six hours; after short delay placenta was expelled with slight pains. There was considerable flowing for the first few days after delivery, but nothing wrong with the uterus. On the sixth day, contrary to orders, she was placed in a large chair and drawn into an adjoining room. While in the chair she felt something give way internally, and complete syncope occurred. She was placed in bed, and Dr. Chubbuck was soon with her. She was then very faint, and appeared bloodless; pulse 140 and feeble. The uterus was then discovered to be completely in-

verted. Having obtained chloroform, and secured the presence of Dr. Wey as counsel, the anæsthetic was administered, and efforts were commenced for the purpose of reducing the organ. The reporter says: "I passed my fingers up to the neck of the inverted womb, clasped the organ with my hand gently but firmly, making steady pressure, and at the same time passing my hand upward; and, as the womb gradually receded, I moved my hand downward, towards the fundus, and grasped anew, gently but firmly passing the uterus upward until the fundus was reached, then pressed my thumb and fingers at the inverted fundus, and carried it to its normal position, with my hand inside of the uterus, holding it there until the contractions were sufficient to warrant its withdrawal." Two days afterwards an examination was made and the organ was in its normal state. Phlegmasia dolens of both limbs afterward; but under appropriate treatment, the patient convalesced, and finally regained her perfect health.

CASES OF TANSY POISONING.

Reported by Dr. Henry Flood, of Elmira. Mrs. S., aged 25, mother of one child, being pregnant again, and desiring to produce abortion, she procured one ounce of the oil of tansy, and swallowed one teaspoonful of it, and retired for the night. She experienced a burning sensation in the stomach, and was soon in convulsions of a severe and dangerous character. The patient being unable to swallow, the doctor administered a mustard emetic by means of a Davidson syringe. Vomiting followed; the matters ejected having a strong odor of tansy. The patient not only recovered, but she escaped abortion, and two months afterwards was progressing in pregnancy.

Mrs. D., in the second month of pregnancy, took largely of a strong decoction of tansy, and experienced symptoms similar to the foregoing. An emetic of mustard had the desired effect in this case also.

IMPERFORATE ANUS, WITH CONGENITAL RECTO-VAGINAL FISTULA.

Reported by Dr. J. K. Stanchfield, of Elmira. The doctor prefaced his description of this infantile malformation with the statement that the mother had—resulting from her first delivery—an extensive laceration of the perineum and recto vaginal septum, which had been remedied by a surgical operation. Resulting from her second delivery there was a slight rupture which did not require a second operation. During this, her third pregnancy, the mother was continually possessed with an apprehension that there would be some deformity, and the thought of the horrible recto-vaginal laceration was often pictured in her mind.

Upon examination, after birth, this third offspring was found to be without an anus; the skin retaining its natural color over the whole space between the parts of generation and the coccyx. Twenty-four hours after birth there was a dark-colored discharge noticed upon the diaper. Further examination revealed a small opening from the posterior wall of the vagina directly into the rectum. Through this small opening the contents of the bowels found a way into the vagina. At the time of reporting, no surgical operation had been performed to remedy the malformation.

The doctor closed his paper by saying: "In this case, it seems as though the maternal imagination must have had some influence in causing this defect in the offspring.

MERCURIAL FUMIGATION IN SPECIFIC DISEASES.

Was the subject of a paper presented by Dr. F. B. Abbott, of Elmira.

STRANGULATED INGUINAL HERNIA.

Case reported by Dr. Albert H. Flood. Mr. B., aged 35 years. After all the ordinary methods of taxis have completely failed, the doctor drew the barrel of a common hypodermic syringe four times full of amber-colored liquid from the tumor, reducing its size at least one-half, and then the loop of intestine was very easily returned into the cavity of the abdomen.

CHASSAGNY'S OBSTETRIC FORCEPS.

Dr. Charles L. Squire, of Elmira, gave an elaborate description of this forceps, explaining its principle of construction and philosophy of action.

Some of its special advantages were summed up as follows:—

1. Reduction of the transverse diameters of the head, *without compression of the brain.*

2. Traction in absolute obedience to the natural direction and movements of the head.

3. Sustained traction.

The new instrument has been used in the city of Elmira during the past year, in two cases, by Drs. H. S. Chubbuck and T. H. Squire, and these physicians were much pleased with its operation.

OPIUM POISONING TREATED BY HYPODERMIC INJECTIONS OF TINCTURE OF BELLADONNA, COFFEE, AND WHISKEY.

Case reported by Dr. John M. Flood, of Elmira. This patient was so profoundly narcotized that, for a time, the respirations were but one per minute, and the pulse forty-two per minute. For the space of four hours the hypodermic syringe was constantly used injecting whiskey and coffee; and several times during the same period tincture of belladonna was injected in doses varying from ten to thirty drops. Success at length rewarded these measures. The reporter says that, probably, more than two hundred injections of whiskey and coffee were administered in the space of four hours.

DIRECT COMMUNICATION BETWEEN STOMACH AND COLON.

A case of the above was reported by Dr. E. Gere, of Chemung.

Mrs. G. W. B., aged about fifty years. Extreme emaciation; left leg œdematous; a fistulous opening at the umbilicus, and a small quantity of fluid oozing therefrom. On opening the abdominal cavity there was found a funnel-shaped formation, consisting of cellular tissue, adherent to the wall of the abdomen, its upper or large end surrounding the colon and duodenum, where they cross each other; the lower or small end communicating with the umbilicus externally, thereby preventing any pus or extraneous substance from escaping into the abdominal cavity. On removing this special canal, the colon was found to be adherent to the duodenum at the point of their crossing, and an opening about an inch in diameter communicated between the two, so that food, or chyme, instead of traversing the small intestines, passed directly from the duodenum into the colon. The gut above the opening was healthy and about the natural size, but below it was contracted or thickened, obliterating very nearly the passage for four or six inches. There was no cancerous appearance about the opening; its edges were well adherent, so that no part of the contents of the stomach could escape into the cavity of the abdomen. The stomach and liver were healthy. During life, the symptoms were those of cancer of the stomach.

CARE OF THE PAUPER INSANE.

Dr. William C. Wey, of Elmira, read a paper re-

citing the history of the pauper insane in the State of New York. The care of the State over the insane, the deaf and dumb, the blind, the idiot, and to some extent of the inebriate, was briefly considered. The writer noticed at some length the intricate question of poor-house care and relief, in its effects upon individuals and upon society at large, and sketched the condition of the Chemung County Poor-house, in respect to the young, the middle-aged, and the aged inmates, whom destitution and disease had brought within the sphere of its custodial authority. He denounced the poor-house system, as it fell under his observation, as inhumane, disorderly, and degrading. Idiots, imbeciles, epileptics, paralytics, men and women long insane and demented, were grouped indiscriminately with paupers, old and young, under nearly the same features of treatment. The more violent insane, secured in filthy cells, and separated from the common paupers by a simple arrangement of upright wooden bars, might be said to share the constant society of the latter class, and be subject to their taunts and derision. No attempt was made towards classification or distinction, because of age, condition, or disease. A helpless lunatic lay naked in a rude bunk, filled with hay, and covered with an old and worn blanket. He had been in the poor-house upwards of thirty years, attended by *fellow-paupers*, in the condition mentioned, through successive administrations of superintendents. His companion in the dark and offensive cell, which for so long a time had been his place of incarceration, was a deformed idiot, nineteen or twenty years old. The receptacle which contained these poor creatures opened by a barred partition, from floor to ceiling, into a common sitting-room, which was occupied each day chiefly by old and helpless men, with a sprinkling of younger imbeciles and epileptics. A middle-aged and tractable insane woman proved so useful to the officers of the establishment, that she had been for a long time employed in doing the washing for the house, composed of more than fifty persons. Disregarding the provisions of the law, which gives to county superintendents of poor a period of ten days in which to forward the indigent insane to the Utica or the Willard asylums, according to the recent or long-continued nature of the affection, it was found that a case of the first description, regularly committed by the County Judge to the custody of the superintendent, for removal, *six months before*, still remained in the poor-house. Delay in sending the insane to their destination, particularly in chronic cases, is a common characteristic of poor-house management. The action of the Board of Supervisors in Chemung county, in permitting such gross violation of law and propriety in the care and treatment of the poor and the insane, was sharply criticised.

A CASE OF CYANOSIS, CAUSED BY CONTRACTION OF THE ORIFICE OF THE PULMONARY ARTERY,

was reported by Dr. William Woodward, of Big Flatts.

COMPLETE RUPTURE OF THE URETHRA.

Dr. T. H. Squire, of Elmira, reported the case as follows:

D. E., healthy farmer, aged 30 years. Saw him in consultation with Dr. Hadden, of Pine Grove, Schuyler County, N. Y., on the 12th of January, 1876. Nine days before, from the upper floor of his barn, he had fallen astride a board partition between two horses. The main violence was received at the upper and inner part of the right thigh, and in the perineal region. Retention followed. A catheter could not be used. The aspiration was successfully used for nine days. At the time of my visit, a large, sloughing, ill-conditioned ulcer revealed itself at the upper and inner aspect of the right thigh, and a small round opening existed in the perineum, to the right of the median line, from which urine had escaped for the last thirty-six hours. Tried faithfully to introduce a catheter, but failed; the beak did not pass beyond the membranous portion of the canal. Performed external perineal urethrotomy. Found the urethra entirely divided, transversely, near the bulb. The precise locality of the distal orifice of the ruptured canal was the object of search for nearly or quite half an hour. At length it was found, and a No. 10 gum-elastic catheter tied in the bladder. When all was thus secure, it could be seen that the fractured extremities of the broken urethra were full one inch apart, the naked and uncovered catheter extending from one to the other.

From that time all his symptoms began to mend. The instrument was kept in the canal continuously, or only withdrawn once in a week or two, and a new one immediately put in its place. Free outlets were kept up for all purulent discharges. The dead tissues sloughed away. Granulation slowly progressed, and, after two months and more, the parts were nearly healed. In closing his paper, the doctor said: "By the continued use of a catheter No 10, till the new tissue between the two portions of the urethra is fairly consolidated, a valuable life will be saved, and a most troublesome organic stricture prevented."

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from May 7th to May 13th, 1876.

WEBSTER, W., Surgeon. At expiration of his sick leave assigned to duty as post surgeon at Fort Warren, Massachusetts. S. O. 85, Mil. Div. of the Atlantic, May 9, 1876.

STERNBERG, GEO. M., Surgeon. To report to the Commanding General Dept. of the Columbia, for assignment to duty. S O. 92, A. G. O., May 11, 1876.

KNICKERBOCKER, B., Asst. Surgeon. Ordered before Army Medical Board, New York City, for examination for promotion, and upon its completion to report by letter to the Surgeon-General. S. O. 88, A. G. O., May 5, 1876.

HAPPERSETT, J. C. G., Asst. Surgeon. Granted leave of absence for three months. S. O. 90, A. G. O., May 8, 1876

WILLIAMS, J. W., Asst. Surgeon. Assigned to duty as Chief Medical Officer of Expedition now being organized at Fort Abraham Lincoln, Dak. T. S. O. 63, Dept. of Dakota, May 8, 1876.

BREWER, J. W., Asst. Surgeon. To accompany recruits from New York City to Dept. of the Platte, and upon arrival there report to the Dept. Commander for assignment to duty. S. O. 90, C. S., A. G. O.

MEACHAM, F., Asst. Surgeon. Assigned to duty at Fort Brown, Texas. S. O. 77, Dept. Texas, May 2.

KIMBALL, J. P., Asst. Surgeon. Assigned to duty as post surgeon at Fort Brady, Mich. S. O. 83, Mil. Div. of the Atlantic, May 6, 1876.

MATTHEWS, W., Asst. Surgeon Assigned to duty at Camp Independence, Cal. S. O. 40, Dept. of California, April 20, 1876.

SHANNON, W. C., Asst. Surgeon. Assigned to temporary duty at Fort Clark, Texas. S. O. 78, Dept. of Texas, May 3, 1876.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending May 13, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
May 6.....	0	14	62	4	48	89	20
May 13th.....	1	6	72	3	46	82	35

COLOR BLINDNESS IN SAILORS AND RAILROAD EMPLOYEES.—Not long since a serious railroad accident occurred just outside the limits of the city, owing, as it appeared, to the engineer confusing the colors of the lights on a train in front of him. Dr. Favre, of Marseilles, calls attention to the fact that while in reference to railway employees the recognition of the red signal is almost the only absolutely essential point, with regard to sailors the green is just as indispensable as the red. At recent examinations of 1050 candidates for employment on railways he has detected as many as 98 color-blind, who were deceived as regards one or more colors, this occurring as regarded violet 78 times, blue 50, green 54, yellow 14, and red 10. Of the 98, 29 only hesitated, and 8 corrected their errors, leaving, therefore, 61 color-blind. Ultimately only 11 had to be absolutely excluded; but if these men had to be examined for sea or coast service, all those who could not distinguish green ought to have been excluded.—*Phila. Med. & Surg. Reporter.*

DEATH OF DR. F. W. ROOT OF HAMILTON, MADISON CO., N. Y.—Dr. Root died on the 8th inst of typho-malarial fever. For more than a quarter of a century he had devoted himself to the arduous labor of a country practice, and by faithfulness in the discharge of his duties had gained the respect of his medical brethren, as well as the confidence of the people among whom he labored. His professional life, therefore, was a success. During the past winter he spent a few weeks in this city, and a large share of that time was consumed in study which would better fit him for the performance of his daily labors at home. It seems but yesterday that we held friendly converse together while wending our way to Roosevelt Hospital, and yet to-day he is dead. Dr. Root was an honored member of the Madison County Medical Society; a regular attendant upon the sessions of the State Medical Society, and always manifested a lively interest in whatever was necessary to maintain the dignity and honor of his profession.

W. M. C.

THE POPULATION OF FRANCE.—From the report for 1872 of the French Minister of Commerce, which has just been published, it appears that there were 996,000 births, 352,754 marriages, and 793,064 deaths in that year. The number of births was 180,879 in excess of the preceding year, but only 2.67 to every hundred inhabitants, whereas in the early part of the present century the proportion was 3.19 to each hundred. The illegitimate children formed more than 7 per cent. of the total number of births, and the department of the Seine, or in other words Paris, supplies four times as many of them as all the rest of France in proportion to the population, while the marriages contracted there are the least fruitful. Of the 352,754 marriages, 147,125 were preceded by a contract, and in 14,433 cases children born out of wedlock were legitimized. There were 3,889 marriages between first cousins, and 340 between uncles or aunts and nephews or nieces. No less than 202,439 of the contracting parties—79,860 men and 122,579 women—were unable to read or write. The number of deaths, 793,064 in all, was 71,256 less than in 1869, and this diminution is attributed to the fact that so many of the aged and the infirm succumbed to the privations undergone in 1870 and 1871. It has been ascertained that the war and the Commune cost France 589,000 lives. The statistics for 1872 show that the mortality of the female sex was less than that of the male, being 2.11 as against 2.28 per cent. Upon the other hand, there are more male than female births, though the preponderance is not so great as it was thirty-five years ago. The general mortality of France is 21 per cent. in the early part of life, 3.10 per cent. from one to five years of age, from which proportion it declines to less than 1 per cent. at five-and-twenty. From the latter age it gradually rises from 1.05 per cent. to 7 per cent. at seventy years of age, and to 22 per cent. at eighty-five. The deaths of twenty-two centenarians were recorded in 1872.

NEW JERSEY STATE MEDICAL SOCIETY.—As has been previously announced, the one hundred and tenth session of this Society will be held at Cape May City (N. J.), on Tuesday, May 23, commencing at 7.30 P.M. A special train will leave Camden on Tuesday, 3.30 P.M., and will run through in two hours and a-half, returning from Cape May on the 24th, at 3.40 P.M. Delegates receive a free pass over the road on these trains. The Pennsylvania Railroad Company have agreed to furnish excursion tickets for members attending the meeting. Dr. Pierson, of Orange, N. J., has the matter in charge. A report of the meeting will be made for this journal.

TOBACCO POISONING.—At Vercelli, in Italy, a recruit was to be examined by a Military Board as to his fitness for service. He swallowed a certain quantity of tobacco, probably to excite palpitations to be construed into disease of the heart. Two hours afterwards he died in agonizing pain.

PHOTOGRAPHY AND VARIOLOUS ERUPTION.—Dr. Ultzman, of the University of Vienna, in a paper read before the Medical Society of Lower Austria, on the "Use of Photography in Medical Science," said that an eruption of small-pox had been made evident by photography twenty-four hours before it actually came out. Although nothing was to be seen unusual on the skin of the patient, the negative plate showed stains on the face which perfectly resembled the variolous exanthem, and twenty-four hours later the eruption became clearly evident.

GRATUITOUS MEDICAL SERVICES.—Mr. HEYWOOD SMITH, of London, (*British Medical Journal,*) suggests a very sensible plan for preventing the abuse of medical charity, and for the protection of the younger members of the profession who may desire a consultation with experts. He says: "I would earnestly submit, therefore, for the consideration of the profession, the following plan: that the practitioner should give his patient a slip of paper or short

note, addressed to any hospital out-patient physician or surgeon, asking for his opinion on the case, both as to diagnosis and treatment; and I am sure that, not only would it never be refused, but the consultant would feel as much honored by such reference to him as if it were made for a richer patient. This plan would increase the confidence of patients in their ordinary medical attendant, and prevent them from going off on their own account to hospitals. It would decrease the labor of hospital physicians and surgeons. The work would be to them more interesting, and the great evil at present so rife would be materially lessened."

Giant Cells.—These bodies have just received some further elucidation through Prof. Bizzozero, in the examination of a curious tumor, which he calls a tuberous elephantiasis of the right labium majus, and which may be considered as an exaggerated hypertrophy of the corium. In one part of the tumor he saw a large number of giant cells, sometimes isolated, sometimes in groups, of various forms, and whose interior was filled with globules of fat; after the removal of which he noticed the presence of 2, 10, 15, and more nuclei in the centre of the cell. Besides these histological characteristics, Bizzozero demonstrated the derivation of these giant cells from the hypertrophy of the simple cells of the connective tissue, as he found in the tumor all the gradations, from the small normal cells up to the largest of the giant variety.—*Gaz. d. Cl. di Torino*, Feb., 1876.

Chlorate of Potash in Obstinate Infantile Diarrhœa.—Dr. Moncorvo de Figueiredo, in an article in the *Revista Medica*, of Rio de Janeiro, narrates the circumstances which led him to appreciate the efficacy of chlorate of potash in a case of obstinate diarrhœa that lasted eight months, in a child two years of age. A solution of the potash, which had been ordered for some other cases of throat trouble, was given to this child by mistake. The effect, however, was very beneficial, so much so that Dr. Moncorvo directed the medicine to be continued, and soon obtained a complete cure. The formula was: one drachm of the salt to five ounces of the vehicle; the dose: a teaspoonful every two hours.

Dr. C. Bonfigli, in the *Journal Il Morimento*, also extols the beneficial effects of chlorate of potash in cases of diarrhœa, which he calls *vaso paralytica*, of cachectic children. He refers to fifteen cases in which the chlorate was taken in doses varying between thirty and one hundred and fifty grains in twenty-four hours.—*Gaz. Medica da Bahia*—No. 1, 1876.

Kerosene and Diphtheria.—If the medical gentleman in Connecticut who has made the remarkable discovery that the burning of kerosene causes diphtheria, will write a paper upon the subject, and read it before the next meeting of the American Medical Association, the gas companies throughout the country will be under lasting obligations to him. If he will do this, he may rest assured that his paper will not be buried in the Transactions of that Association.

Dartmouth Medical College and Preliminary Education.—From the last annual announcement we quote the following:

"Applicants for admission must be eighteen years of age, and unless matriculants of this institution (Literary Department), or graduates of some reputable College, Academy, or High School, must pass an examination as to fitness for entering upon and appreciating the technical study of medicine."

The New Jersey Pharmaceutical Association met in New Brunswick on the 17th inst.

Cure of Snake Bites.—In Australia subcutaneous injections of ammonia are being used very successfully for the cure of snake bites. The Melbourne *Argus* reports several cases in which coma had set in. One case was of a woman whose body was growing cold when the remedy was successfully applied.

Spiritualism.—The Commissioners appointed by the Physical Society of St. Petersburg to examine the phenomena of spiritualism, have arrived at the following conclusion:—"That those so-called spiritual manifestations proceed from unconscious movements, or from a conscious imposture, and the spiritual doctrine is a superstition."

The Medical and Surgical Reporter of Philadelphia has reached its one thousandth edition. Its present editor is Dr. J. H. Brinton, whose qualifications for the responsible office are unquestioned. We hope he will live to see its two thousandth edition, and write his usual telling leader on that occasion.

Inhuman Treatment of a Lunatic.—Mr. Wyer, a surgeon at Eastwood (Eng.), was recently sentenced to three months' imprisonment for keeping his lunatic sister in an attic where there was no ventilation and no fire, and allowing her to be naked and in a filthy condition.

Guano as an Antiseptic.—The Captain of the ship *John Brice* and his son were drowned in the South Pacific Ocean, Sept. 10, 1875. Their bodies were packed in guano, and were delivered in this port May 7, 1876, and were found in a good state of preservation.

Dr. C. E. Brown-Séquard.—The University of Geneva, which has recently reorganized its faculty, has tendered the chair of Physiology to Dr. C. E. Brown-Séquard. M. Reverdin has been invited to the chair of General Surgery.

Professional Courtesies.—A practitioner of Portush (Ireland) lately sued at law a medical brother, an Indian officer, for an attendance on his wife. This preposterous claim is very justly condemned by the medical press of Great Britain.

Changes of Sex.—"The mode of reproduction amongst mollusca varies. Some, like the Valvatidæ, change their sex after a time, being at first male, then female."—*Harting, on Shells.*

New York Medico-Legal Society.—Hereafter the stated meetings of this Society will be held in the Hall of the Academy of Medicine, on the first Wednesday evening of each month.

The Pharmacy Bill.—The proposed amendments to the Pharmacy bill were not acted upon by the recent State Legislature.

The Minimum age for School Attendance in this State has been fixed by law at five years.

The Plague is decreasing in Mesopotamia.

Weekly Bulletin of the Meetings of Medical Societies.

Monday, May 22.—Medical Society Co. of N. Y.
Tuesday, May 23.—Yorkville Med. Association.
Wednesday, May 24.—N. Y. Pathological Society.
Thursday, May 25.—Brooklyn Pathological Society.
Friday, May 26.—N. Y. Medical Journal Association.

Original Communications.

KUMYSS, RUSSIAN MILK-WINE; ITS PREPARATION AND USE.

By ADELHEID LUKANIN, M.D.,

NOVGOROD, RUSSIA.

Kumyss, the national drink of the nomad tribes of the south east and south of Russia, has gained such an extensive therapeutical use in Europe, and especially in Russia and Germany, that it deserves to be brought to trial in this country, where the conditions are most favorable for obtaining it.

The hope to lead the attention of American physicians to that new curative agent has prompted me to write this article. I am most indebted for the material to the lamented Professor of Materia Medica, Dybkovsky of Kief, and to my late friend Dr. Anna Klimenum of Odessa, Russia, who died of consumption and was sustained a long time by the most appropriate use of kumyss.

I shall be very happy if my sketch evokes some interest among American physicians.

Historical and Ethnological Notice.—As is known, the eastern parts of Russia, especially towards the south, consist of endless prairies between the Volga and Ural, scarcely known even to the civilized part of Russia, and inhabited by nomad tribes, which know nothing about agriculture, but have large droves of cattle, camels, buffaloes, and especially an immense number of horses. These prairies, or steppes, are covered in summer with savory grass; and the herds graze there, passing slowly from one place to the other, followed by their owners, the nomad tribes, which seldom consist of many members, but oftener of a few families. They pack up their kibitkas, a kind of tents made of skins and felt, which are their dwellings in summer and winter time, and wander farther, prompted not only by necessity, but also by their wandering spirit. I think that Americans can better than any other people realize what a Russian prairie is: it is a sea of waving grass, which is so high, that a man in upright position is hidden by it. Seldom a hill is met with, never a mountain, and in the midst of it large, beautiful streams rolling their lazy waves towards the Black or the Caspian Sea. Not a human being is to be met for several days and even weeks by the solitary traveller; not a road, not even a path; in the day the burning heat of an almost tropical sun; in the deliciously fresh and even cold nights, myriads of stars in a sky of a deep blue, unknown in other regions. In winter time, nobody excepting the nomad dares to cross the snow covered desert.

By chance the traveller meets a camp of Kirghizes; he is quite astonished to see the bright-looking, healthy people, neither too beautiful nor too clean, but happy. He inquires about their mode of life, and they readily tell him all about it, and that their food consists of plenty of meat and milk, especially of the latter, which they prepare in different ways, among others as kumyss. This production, having been quite unknown to the Russians, it is only natural that it was to the mysterious drink that the health of the nomads was solely ascribed; but their living always in good fresh air, and having work and rest at their own leisure, in reality contributes largely to this result. Be it as it may, the sedentary Russians, settled on the western confines of the steppes, sent their invalids in summer-time to visit their wandering neighbors, and gather strength by drinking kumyss. They drank freely of it and, *post hoc ergo propter hoc*, spoke of Kumyss as of the agent of their sometimes almost wonderful cures. At last, about twenty-five or thirty years ago, physicians, and lately chemists, grew so far interested in the subject that scientific researches were made, both of clinical and experimental character, and great establishments were founded throughout Russia, where thousands now seek and sometimes find health, or at least relief for a given time from their sufferings; as, Dr. Stahlberg's cure-house near St. Petersburg, Russia, where kumyss is prepared from mare's milk, and others in middle Russia and in Krimea, in some of which cow's milk is used. Such cure-houses are also established now in Germany; so in Austria, near Vienna, in Trautmannsdorf; in Davos, in the Rhetish Alps in Switzerland, and in many other places.

Wisk, in Bremen, and Schnepp, in Eaux-bonnes, have written about kumyss. In France it was unknown till 1867.

Preparation of Kumyss.—Kumyss (*Vinum lactis, Lac equinum fermentatum*) is prepared by the fermentation of mare's milk. The fermentation of milk-sugar produces alcohol, carbonic acid, and lactic acid, and to these products the action of kumyss seems to be chiefly due.

The analogy between the vinous fermentation and that of kumyss gives us the right to call kumyss a milk-wine. It is prepared in three different kinds of vessels: in wood, well dried skins, and clay. In these vessels the mare's milk is fermented by means of sour dough or other ferments. In most cases, as ferment, is used old kumyss or a sediment from old kumyss which has been dried in the sun or over a slow fire, and is called kor.

Half a pound of kor is dissolved in two bottles* of fresh mare's milk, but before this solution is used it is left standing till it gets sour. Where there is no such ferment at hand, an artificial one is prepared from fresh yeast, wheat, or other flour, or honey and milk; from these a dough is made, and when it begins to rise it is wrapt in clean linen and put in fresh milk. When the milk becomes sour, the dough and the milk might both be used as ferment.

Another ferment again is the ordinary milk itself. The casein, before it coagulates, has the property of inducing the alcoholic *fermentation* of sugar at a temperature between 28 and 40°R., but at the same time at this temperature, before the sugar is changed into alcohol, lactic acid is formed, the casein coagulates, is precipitated, and the alcoholic fermentation is checked.

This is the process we meet in the ordinary souring of the milk.

I am not responsible for this statement, which expresses the current view held by the majority of authors who have written about kumyss. One thing is sure, that lactic acid, as soon as it is formed in greater quantity, seems to deprive the natural ferment, be it casein or any kind of animal or vegetable microscopical beings, of its property to induce the alcoholic fermentation.

The Baschkires and Kirghises of the steppes counteract this by adding to the milk one third of spring water which is more or less alkaline, and continually stir the milk, as contact with air seems to be very favorable to the formation of kumyss. Only in cases where the fermentation does not begin at once, they

* A bottle is a measure containing about 600 to 650 grammes of water, at the ordinary temperature.

use a piece of rye bread as a ferment. Some tribes use alcohol and yeast, a copper coin, a piece of fresh horse-flesh or a fresh tendon, etc.

The principal manipulation, of which there are several, either to arrest or to promote the fermentation, consists, as mentioned above, in stirring the milk, which prevents coagulation and settling of casein, and rising of cream.

Kumyss may be prepared of different strength, according to the time it has fermented and the quantity of sugar that the milk contained. Different kinds of milk might be used. The best after mare's milk is ass's milk. Goat's milk contains too much casein, which predisposes to putrefaction, and not enough sugar. Cow's milk is good, with an addition of sugar and water. Even the nomads in preparing kumyss, which serves them sometimes to intoxicate themselves, add cow's milk when mare's milk is wanting.

Description of Kumyss.—Kumyss is a milky fluid of a sweetish acidulous taste, which reminds one somewhat of sour cream. The taste of old and fresh kumyss is different. Fresh kumyss is sweeter and contains less carbonic acid and alcohol; the old is sourer, has more alcohol, and so much carbonic acid that it reminds one of soda-water. In standing, kumyss separates into two layers; the upper is clear, the lower is cloudy, containing the finely divided casein. Fresh kumyss is milky; old, clear. Its smell depends upon the cleanliness of the animal from which the milk is contained, and the cleanliness of the preparation. There is almost no odor at all, if the laws of cleanliness have been observed. Kumyss prepared in spring is poorer in alcohol, and has a somewhat aromatic odor depending upon the fresh grass and flowers eaten by the animal.

The relative quantities of chemical constituents depend not only upon the mode of preparation, but also upon the condition and nourishment of the animals which give the milk. For instance, with more exercise, the quantity of casein increases; with rest, the fat; when nourished with oats, the milk-sugar, etc.

It may be the place here to say a few words about the way in which some of the establishments founded abroad manage to have good kumyss, and the difficulties with which the obtaining of genuine kumyss is accompanied. So in Dr. Stahlberg's establishment near St. Petersburg, and even in Trautmannsdorf near Vienna, the horses, and the persons who take care of them and prepare kumyss, have been brought in from Tartaria, as the milk of the steppe horses could alone —as was thought—give genuine kumyss; but it was found that even with all these precautions kumyss prepared in the latter way, seems to differ from that of the steppes; according to the physicians who have tried both, it is not borne as easily and has not the same beneficial influence, which may depend upon the different climate, mode of life both of patients and horses, and different kind of food for the horses. Lately the Tartars have been replaced in Trautmannsdorf by Germans, who have learned to make kumyss very well, and at any rate in a cleaner way than the Tartars. The buying, bringing, and keeping of steppe horses is very expensive, especially if we take in consideration that their mode of life must be as much as possible like their mode of life in the steppes; they must have extensive grazing grounds, and be able to range freely from the melting of the snow in spring until it again covers the ground; they must never be separated from their young, because a mare will not give any milk if it loses its young. In the winter young and old horses are gathered in a large yard, and are nourished with hay, flour, and fresh water. In summer they graze as stated above.

A mare is milked six times a day in summer, and once a day in winter. Each gives from one to six litres of milk a day.

Kumyss from cow's milk prepared and analysed in Warsaw:

Alcohol, 1.23 per cent. fat, 0.52; sugar, 1.77; lactic acid, 0.63; casein, 3.08; salt, 0.63; carbonic acid ? (whole quantity of solids, 7.67.)

This analysis shows that in kumyss 2 days old, not the whole quantity of sugar is changed into alcohol and carbonic acid.

The fermentation once begun goes on, even if kumyss is put on ice, till all the sugar is changed; this lasts about 6 to 8 days. Such kumyss, besides containing more alcohol, is also sourer.

Kumyss made in September and kept in an ice cellar till February, showed the following relative quantities of constituents:

Alcohol, 3.23 per cent. [which corresponds to about 6 of milk-sugar]; fat, 1.01; sugar, 0.00; lactic acid, 2.92; casein and salts, 1.21; carbonic acid, 1.86; whole quantity of solids, 5.14.

The chemical process in the production of kumyss is the following: a given quantity of milk-sugar under the influence of a ferment, and at a temperature between 20° to 40° is changed into a glucose,* which farther is changed into alcohol and carbonic acid. Besides this, we find some other not essential products of fermentation and lactic acid. As kumyss of middle strength is usually given, I will give the results of Gartier's analysis of a kumyss two days old:

Alcohol, 1.65 per cent.; fat, 2.05; milk-sugar, 2.20; lactic acid, 1.15; [whole quantity of solids, 6.80.] casein, 1.12; salts, 0.28; carbonic acid, 0.785; [which correspond to 3.22 of milk-sugar.]

The albuminous constituent parts are found mostly in a soluble modification.

Physiological Action of Kumyss.—In small doses, *i.e.*, about two or three tumblers, kumyss produces only a feeling of warmth in the stomach; strong kumyss produces besides this an effect like champagne, soda-water, or seltzer-water, owing to the carbonic acid that it contains. It is borne by the stomach more easily than milk; if two or three bottles of milk or water are drunk daily, they produce a disagreeable feeling of fulness and heaviness in the stomach, which is not the case with kumyss, owing to its ready absorption promoted by the presence of alcohol and carbonic acid. Some nervous and sensitive patients have an idiosyncrasy against kumyss; sometimes, without any prejudice against it, a few glasses produce nausea and vomiting. Such an idiosyncrasy may be in some cases mastered; patients grow used to it, especially if they begin with very small quantities,—they even grow fond of it; but sometimes the idiosyncrasy persists, and the treatment cannot be continued.

If kumyss is used in large quantities, there appears a feeling of discomfort, of apathy, and even sleepiness; a kind of intoxication of a low degree.

Notwithstanding that with kumyss a large quantity of nourishing substances is brought into the system, the appetite is not impaired, the patients take their meals regularly and with pleasure. Fresh kumyss produces rather looseness of the bowels; old kumyss constipation. This is very important in giving means to regulate the action of the bowels throughout the treatment, in giving alternately fresh and old kumyss.

* Dilute acids change milk-sugar into a peculiar glucose called galactose, which is directly fermentable; it is possible that lactic acid in small quantities has the same property of changing milk-sugar into galactose.

If the tongue was coated in the beginning of the treatment it cleans in a few days.

Absorption of kumyss is easy and almost complete, only a small quantity of it being excreted with the fæces; more, although not very much, by the skin and kidneys.

Kumyss is not a diuretic in the true sense of the word, although the salts and the great amount of water that it contains have an influence on the daily excreted quantity of urine. There are no records of analysis of the urine from patients treated with kumyss; it is very likely that there are changes in it depending upon the increased quantity of water and nourishment taken into the system.

To this increase of nourishment must be attributed the increase of weight of the patient, beginning to appear in the second or third week of the treatment; if this is carried on six or eight weeks, the increase amounts to about 20 lbs.

The skin becomes clearer, and its color brighter and healthier.

If strong kumyss is used, the pulse increases in frequency about ten to fifteen pulsations in a minute; as soon as the patient grows used to kumyss the pulse becomes again normal, just in the same way as if another alcoholic drink was taken.

The respiration is also more frequent and impeded by the distention of the stomach. The sputa if present —become more profuse, more liquid and frothy; —all secretions are more liquid owing to the greater amount of water taken into the system. Some authors assert that kumyss has an influence on the genital system; that men grow more excitable, and women menstruate oftener and the discharge is increased in quantity. This may depend upon the diuretic influence of kumyss irritating the kidneys, bladder, and urethra, from which the irritation is reflected to the genital system—or upon the better nourishment making the genital system more active. Some excitement is produced in the beginning in the nervous system, especially in patients not accustomed to alcoholic drinks, which is followed by drowsiness. A few patients, however, grow excited in such a measure that they totally lose sleep. Patients who have disease of the heart begin to suffer from palpitations, so that it is either necessary to use morphia or to abandon the treatment at once.

Dr. Polubensky, in Russia, states that after a protracted use of kumyss, there may appear an exanthema very like urticaria, and painfully itching, which fast subsides on the use of acetate of morphia, and seems therefore to be simply of a nervous character.

We might infer from what has been said above, that kumyss has no specific influence whatever on the system, its power consisting chiefly in the greater amount of nourishment brought into the system under conditions of either solution or fine division, promoting its easy digestion and speedy absorption. However, let us consider its chief constituent parts; and, first of all, the alcohol.

The following qualities, shared more or less by all the alcohols, are:

1. In small quantities it promotes absorption, as has been proven by Claude Bernard.

2. It saves the fatty and also the nitrogenized substances from oxidation.

3. It promotes both secretions and excretions.

The qualities under heads 2 and 3 have been beautifully illustrated by Professor Setschenoff's experiments in St. Petersburg.

4. It excites and heightens the nervous actions—which in some cases might not be desirable at all.

I must add here a few words about the sleep induced by kumyss, and which is very likely to be attributed to the alcohol. In general it seems that there is comparatively too much attention given to the temperature of the body in diseases, and not enough to sleep. At the same time, the experiment of Niemeyer, Pettenkofer and Voigt have proved what an immense influence sleep has on the exchange of matter in the living organism.

They showed that the system gives out more carbonic acid in the day-time, and takes more oxygen in the night during sleep; in this way the larger quantity of oxygen exhaled in day-time is replaced in the night, and the patient awakes refreshed and rested. 5. Alcohol lowers the temperature of the body and increases the power of the heart. Let us consider farther the milk-sugar and the lactic acid.

Professor Botkin, in St. Petersburg, made experiments which proved the beneficial influence of milk-sugar upon nutrition. He states that the weight of patients increased after a treatment with milk sugar. I think that it may be interesting to mention that Arabian physicians have used milk-sugar in the treatment of consumption.

Frank compares the action of lactic acid to that of the organic salts; it lowers the temperature of the body and decreases the frequency of the pulse, which makes its use desirable where fever is present. Reich ascribes to this acid tonic, antipyretic, and diuretic properties. The casein is present in kumyss in a soluble form, and also in an insoluble; but then it is very finely divided, which has been stated above, so that it is unnecessary to dwell upon it longer.

As to the carbonic acid, it lowers the rapidity of the heart's action by influencing the inhibitory filaments of the pneumogastric nerve, and acts locally on the stomach as a tonic.

Therapeutical Use of Kumyss.—1. Kumyss is given in disease of the digestive organs, as catarrhs, chronic diarrhœas; in all diseases gathered under the head of dyspepsia; in the period of convalescence from typhus and dysentery. It does not increase the difficulty of digestion, and this explains partly its beneficial influence.

2. In disorders of the respiratory organs, and especially in consumption, I feel obliged to make here a digression about the hygienic treatment of consumption in general. An idea very popular now in Europe is, that production and storing up of fat in the organism is a preservative and even a curative agent in diseases of the lungs, especially in phthisis or protracted specific catarrhal pneumonia, with deposits of inspissated catarrhal secretion, or cheesy matter, *i.e.*, yellow tubercle; that is in the so-called scrofulous form. The better nutrition, the formation of fat, prevents the wearing out of the organism, and gives it the possibility of outliving, so to say, the slow inflammatory process going on in the lungs, and to attain the period of retrogressive metamorphosis of the cheesy matter, consisting in softening, emulsification, and absorption of the tubercle. The absorption once accomplished, cicatrization might follow. These statements are not merely theoretical; old cicatrices are found in the lungs of patients who died from other diseases, and where there had been for some years a notorious disease of the respiratory organs, which had subsided under treatment. I think that in many a case of consumption, death occurs, not from the impossibility of breathing, but from the exhaustion occasioned by the slow consuming fever, which kills here, as it kills in protracted suppurations, etc.

This statement implies another, namely, that all hy-

gienic curative agents like kumyss are invaluable in consumption. Its use in Russia has been brought into practice by the observation how wonderfully soon the constitution of the nomad, which had been lowered in the winter by bad hygienic conditions, becomes again healthy and brilliant in summer, and by the idea that those nomads never suffer from consumption. The first observation was perfectly right; the second based partly on a mistake. It is true we find less consumption among those tribes, but this is mostly due to the dying out of the weak children, so that only those remain that are mostly fitted to their rude mode of life. For this reason also we find less scrofula among them.

Kumyss is especially very useful in the beginning of phthisis; it cannot do much if the patient is already in the stage of diarrhœas and colliquative sweats.

If kumyss is taken steadily in other chronic lung diseases the nutrition grows also better; the patient gains flesh and feels stronger. In patients inclined to hæmoptysis the blood-spitting appears again with the use of kumyss, even if it had ceased before the beginning of the treatment, but this is not a contra-indication altogether; if the hæmoptysis is not violent, one can continue the treatment, and give either weaker kumyss or interrupt it for some time; even if the treatment is continued without change, the hemorrhages usually subside after some time. Kumyss is not so useful in cases attended with hectic fever.

Dyspnœa grows better after some time; the expectorations become easier, which explains the usefulness of the remedy in chronic bronchitis, both in the idiopathic form and in that attending emphysema of the lungs.

3. Kumyss is very useful in anæmia and chlorosis; in short in all conditions of defective nutrition: as in protracted suppuration, prolonged lactation, in convalescence from fevers, in scurvy and its allied diseases, in hypochondria, in hysteria accompanied by anæmia; and, as stated above, in diseases of the digestive organs.

4. It has been used in nervous diseases, but here its influence is not well known; at any rate, it might do well in functional nervous diseases complicated with anæmia.

1. *Contra-indications.*—Kumyss is not to be given to plethoric patients inclined to apoplexy, and to those who possess a strong tendency to hemorrhages, remembering the stimulating effect of the remedy and the increase of pressure in the blood-vessels produced by it.

2. Nor in diseases of the heart.

3. Nor in diseases of the kidney and bladder, as it irritates them.

4. Nor in pronounced acute and chronic febrile diseases, although it can be given in the time of convalescence from them.

6. Nor in gout.

7. Nor in pregancy.

8. Nor in organic nervous diseases.

9. Nor in the last stages of consumption. But we may recall the properties which have been claimed for kumyss, and administer or withhold it according to the indications.

These properties are briefly the following:

1. Promotion of the formation of fat and promotion of sleep—due to alcohol.

2. Promotion of nutrition in general—due to milk-sugar.

3. Lowering of temperature and pulse—due to lactic acid and alcohol.

4. Renewal of the wasted albuminoid parts—due to casein.

5. Lowering of the frequency and increasing of the power of the heart's action—due to carbonic acid.

6. Tonic action of the carbonic acid.

7. Diuretic effect of the greater amount of water and salts introduced into the system.

We do not find all these qualities combined in any single article of food or medicine except kumyss.

Dose and Form.—The dose is the largest quantity that may be taken without injury: four to six or eight bottles a day. I think that more would be scarcely possible.

The use of fifteen bottles, or of only two to three tumblerfuls, would alike be useless, and the first even injurious. The diet should be mixed and substantial; vegetables and fruits are to be recommended; if needed a small quantity of strong wines or liquors may be given; better avoid them. Tea and coffee may be taken or not, as the patient is used to them; if anything is taken, coffee is to be preferred, as having a very good tonic influence in the rare cases where kumyss impairs digestion but rhubarb in small doses has the same tonic effect. Some authors recommend a meat diet as the most suited to the treatment. Exercise is to be advised. Kumyss is to be drunk from June till September.

The course of treatment is usually begun with two to three tumblerfuls a day, increased gradually to several bottles, and carried on about six to eight weeks; but it is more beneficial when prolonged, because of the comparatively little good done by kumyss in the first weeks. Some patients, although not liking kumyss in the beginning, become quite fond of it in time, as stated above. It can be given also in the winter, only it must be kept in mind that patients perspiring more freely when taking it, care must be taken not to expose them to draughts.

Kumyss prepared from Cow's Milk and Artificial Kumyss.—These kinds of kumyss are prepared in different ways.

1. From fresh warm cow's milk: the milk is diluted with one-third or one-quarter of water, and one tablespoonful of cane sugar is added to each bottle of milk (a bottle contains from 600 to 650 grms. of water at the ordinary temperature), and a bottle of ordinary yeast. It is still better to add one-quarter of a bottle of old kumyss, if it is to be had; then the whole mixture is put into thick beer bottles, well stoppered, and placed in a cellar; it must be from time to time agitated, to prevent the coagulation of casein. In three days the kumyss is ready, and must be drunk when fresh; as prepared in this way it does not keep a very long time.

2. Skimmed milk might be used without being diluted, and kumyss prepared in the same way as above.

3. Instead of diluting the milk with water, it might be diluted with whey.

4. Dr. Schwalbe gives a recipe for the preparation of artificial kumyss as follows: 100 grms. of condensed milk are dissolved in 1½ litres of water, 15 grms. of alcohol, in form of rum or cognac (brandy), are added, also 1 grm. of lactic acid or 0.5 grms. of citric acid, and this is saturated with carbonic acid in the usual way for preparing soda-water; the mixture must be well agitated, being in the soda-water apparatus, and the kumyss is ready after 24 to 48 hours.

5. Recipe for the preparation of kumyss given by Professor Julius Trapp, in St. Petersburg:

Take 24 lbs. of mare's milk and 4 ounces of honey, and mix them.

The yeast to be added is prepared in the following

way: 1 ounce of semen-panici miliacei reduced to flour, 1 ounce of beer-yeast and enough milk added to make a semi-solid mixture, which is put in a linen-bag and immersed in the mixture of milk and honey. The whole is covered with a cloth and exposed for 24 hours to a temperature of about 30 to 35 R. Then the liquid is strained, put in bottles of thick glass, well corked, and put in a cold place, because kumyss acts like soda-water or champagne, owing to its great amount of carbonic acid, and may burst the bottles.

Professor Trapp advises making kumyss from cow's milk to which ¼ of water has been added.

We have seen above that this additional quantity of water is variable as well as the temperature at which kumyss is to be prepared, according to different authors.

In general the subject is not as yet sufficiently studied; although it deserves, as it seems to me, to be thoroughly tried, as possessing many a valuable quality.

HYPERTROPHY OF THE SPLEEN SIMULATING OVARIAN TUMOR.

By DAVID F. KING, M.D.,

NEW YORK.

The following case, though not without interest in a pathological point of view, is especially so in a diagnostic, and shows the difficulty of making accurate diagnoses of the different kinds of abdominal tumors presented to our notice.

Catharine Brown, æt. 31, M., England; housekeeper by occupation, and quite intelligent. She came under my observation Nov. 19th, 1875, when living in the upper portion of this city, in a somewhat malarious neighborhood. Family history good. With the exception of an attack of malarial fever of ten months' duration, ten years ago, and what appears to have been general anasarca with ascites, which lasted nine months, nothing worthy of special note could be ascertained previous to present illness; was delivered of a child six years ago, which lived two months, then died of what was said to be "enlargement of spleen;" an autopsy being held. She lost another some time after in the same way.

Three and a half years ago was delivered of seventh child. Labor perfectly normal.

She was in the enjoyment of exceedingly good health for three months after, when, following great exposure, she was taken with sharp pains in the region of the spleen, and in this situation, at the same time, noticed a lump about the size of a tea-cup. A physician of St. Louis pronounced the spleen affected. The lump kept gradually enlarging downward; slowly pushing its way towards the right side, and over the abdomen, changing in shape seemingly; sometimes round, sometimes oblong, etc. It would not remain stationary but would fall to the right when she turned towards that side; was seen by an eminent physican of Chicago and treated for "tumor of womb;" others pronounced it the same, while another skilled gynæcologist in the same city told her it was "enlargement of spleen." Has never had any pain in the growth since. When she took exercise it would seem to become smaller, returning to original size after exertion had ceased. When having her courses the lump would increase in size, and go down after their termination. Menses ceased six weeks ago, and have not come on since.

Suffered from "piles" twelve years ago, which bled once a month, also from external hæmorrhoids since she has had the tumor, which caused much pain and from which she has lost blood at times. Lower limbs commenced to swell slightly about two years ago, and a year ago increased considerably in size. Has retained flesh and strength, and been pretty well up to about three months ago, when she began to grow weak and passed but little water. At this time suffered from pain in right hypochondriac region of so severe a character as to oblige her to remain in her room for three weeks. She noticed no enlargement of right side.

She entered Mt. Sinai Hospital, Sept. 24, 1875, and while there was seen by many the ablest practitioners of this city. The principal symptoms noticed during her stay there were: passage of blood from the bowels; failure in flesh and strength; night sweats and high temperature; average about 101°. The highest was 105°, lowest, 98°. The diagnosis made was: "Lympho-sarcoma of the omentum."

Has suffered from epistaxis off and on for the last three weeks. About two weeks ago began to cough and expectorate yellow phlegm.

Present Condition.—Patient emaciated and excessively anæmic in appearance. Is suffering from cough, with expectoration of yellow phlegm; night sweats loss of flesh and strength, and impeded locomotion, in consequence of weight in and enlargement of the abdomen. Physical Examination: Pulse 120 (feeble and compressible); resp. 24; temp. 100.

Lungs and Heart.—Nothing worthy of special note. Former gives evidence of bronchitis. Action of latter feeble; impulse weak with sounds indistinct.

Abdomen.—Patient lying on her back; a tumor presents about the size of uterus at full term, freely movable, with well-defined edges. It extends from left to right, and has about the middle of upper border quite a deep depression. The lower part can be lifted, and is more rounded to the hand.

The tumor is smooth and somewhat elastic to the touch. Percussion gives dulness all over the mass. By a *bimanual palpation* the uterus is found separated from the tumor being freely movable, and of normal size. The mass cannot be felt through the vaginal walls.

Lower Extremities.—Tender, with well-marked pitting on pressure; swollen.

Urine.—Amber; acid; slightly albuminous with urates; granular matter; no casts.

About two weeks after this the woman was seen by a prominent gynæcologist of this city, who, after an examination, thought it was adeno sarcoma of the left ovary, but was not positive in this diagnosis, and proposed an exploratory incision, if the woman made up her mind to enter a hospital. The other physicians present at the time did not express positive opinions, but were inclined to believe it was "enlargement of the spleen."

Dec. 3d.—Dr. Whitall saw the case in consultation with me. It (the tumor) is concavo-convex in shape, the concavity pointing upward and to the left, the convexity downward and to the right. The lower margin can be felt also, and is found to be fissured in two situations, which makes the tumor resemble very closely the liver. The spleen, by auscultatory percussion, cannot be detected in its normal position. There is a continuous line of dulness extending from the liver down. The tumor is determined to consist of spleen, with perhaps involvement of the liver. From the tumor being so movable, however, and from dulness having existed in the hepatic region when the mass was on the opposite side, the latter is doubtful.

Microscopical examination of the blood revealed no increase of white corpuscles. The majority of the red corpuscles were indistinct, with ill-defined outlines; some very much shrunken in appearance. By focusing, however, the bright centre and dark border could be obtained; also the biconcave appearance. In some parts of the field they would form in rouleaux, while in others they evinced no tendency to do so. The blood, when flowing from the scratches in the arm, was thin and of a watery appearance.

Dec. 18th, 3.30 P.M.—Great weakness from excessive epistaxis. Looks completely exsanguinated; lips and gums very pale; tongue light in color and coated on dorsum; surface of the body covered with a profuse cold perspiration. Pulse 132. Resp. 28. Temp. 101.2. Is taking stimulants freely.

Dec. 25.—Patient is failing rapidly. Slight epistaxis yesterday, which ceased after the application of liq. ferri persulphate. Pulse very feeble, 136. Resp. 28. Temp. 101.5. Patient died about 3 A.M. on the 27th.

Necropsy, 35 hrs. P.M.—Rigor mortis slight. Body emaciated. Abdomen only examined, and that imperfectly, in consequence of the presence of the husband, who with great reluctance permitted *any* examination. The tumor was observed to have remained almost entirely on the right side. It was clearly an enormous spleen, turned upon itself, with the hilus presenting upward and to the left. The surface of the organ was smooth. It was of solid consistence and of a bluish color, with the peculiar elasticity to feel common to the spleen. The fissures noticed were those peculiar to the spleen; but greatly exaggerated. No section could be obtained.

The organ was supposed to be, by the physicians present, fully twelve pounds in weight. The omentum was perfectly normal in appearance; very little adipose tissue found. The glands were not investigated thoroughly, as no further examination could be made. The liver was pushed up by the tumor. It seemed to be of normal size, but very pale in appearance. Small amount of fluid in lower portion of abdomen.

The case presents in many respects great resemblance to one of splenic lukæmia. The gradual enlargement of the organ, without attacks of intermittent fever, or without constant exposure to malaria; the development of languor, debility, and great pallor of surface without any other appreciable cause; the occurrence of hemorrhages from the nose and bowels; œdema of the extremities: absence of *marked* emaciation; change in the blood, though certainly there was seemingly no reduction in the number of red corpuscles; all *point* to this form of lukæmia as the cause of the patient's death.

No. 1113 Second Avenue, New York.

The Bordeaux Medical College.—The municipal council of Bordeaux voted unanimously on the 25th of February, the sum of $500,000 to defray the expenses of installation of the new College. The mayor is authorized to purchase in the name of the city the Hospital for Incurables, and the Maternity, both situated on the east side of the *Place d'Aquitaine*. The construction of the new Faculty will be determined by a "concourse."

A New Pavement.—The *Revue Scientifique* speaks of a new pavement which is about to be tried in Paris. On a bed of masonry a layer of asphalt is spread, in which blocks of cast-iron one and a half inches thick are imbedded. It is a sort of iron mosaic.

A CASE OF HERPES ZOSTER, WITH HYPERIDROSIS, TREATED BY ELECTRICITY.

By FREDERICK WILLIAM GODON, A.B., M.D.,

San Francisco, Cal.

Peter D., æt 43, married, a native of Germany, miner, of blonde complexion and exceedingly nervous temperament, sent for me Jan. 3, 1876, to consult me in regard to an eruption which had appeared three days before. The vesicles—for the eruption was herpetic—first made their appearance in the groin, above and below Poupart's ligaments, and in the lumbar region; then on the right side of the scrotum, and in the corresponding nates, continuing downwards on the front of the thigh, the lowest vesicles being about three inches above the knee. The gentleman in attendance prior to my being sent for had pronounced the case one of sciatica, and had prescribed a liniment, and had given morphine internally to assuage the pain. The eruption was preceded by the most acute pain. Most if not all of the superficial branches of the lumbar and sacral plexes were involved. The nature of the pain following the evolution of the exanthem was severe and shooting, extending from the hips to the knee, exaggerated near the spine, and again cutting and stinging, running along the groin towards the penis. The pains, although never entirely absent, were distinctly remittent. The parts covered by the eruption were literally bathed in a most profuse and oppressive sweat, as indeed was the entire right side of the body. The patient gave a good family history, denied any venereal taint, was not an habitual drinker, although within the last three months, during which time he had suffered from several attacks of trifacial neuralgia, he confessed to have indulged rather immoderately in alcoholic stimulants, which he thought relieved his pain at the time. He had suffered from a severe attack of rheumatic fever six years ago. He was weak and anæmic when I saw him, without appetite, and in great pain; and, as a consequence, irritable. The locality of the eruption points decidedly to the conclusion that in this case, if not in all cases of *herpes* zoster, the primary lesion is central, and in all probability seated in the ganglia of the posterior roots of the nerves of the affected side.* The unilateral hyperidrosis, which was well marked, was undoubtedly owing to nervous debility brought on by great mental anxiety and worry.

Inasmuch as the patient's stomach was exceedingly irritable, I prescribed no medicines internally, with the exception of quinine in two-grain powders every four hours. Galvanism was immediately resorted to for the alleviation of pain, and applications were made both locally and centrally, to the immediate relief the patient. Sixteen hours after the first application of the galvanic current the patient passed a quiet night, and on the following morning was entirely free from acute pain, although there still lingered a diffuse tenderness over the lower lumbar vertebræ and in the neighboring region. The patient was again galvanized centrally, and left feeling quite comfortable. After the third application, made at the expiration of thirty-six hours, the patient said he felt quite comfortable, and noticed that the eruption appeared to be fading. He continued to improve under the treatment; the eruption had entirely disappeared at

* *Vide* "Anstie on Neuralgia," *Reynolds' System of Medicine*, Vol. II., page 737.

the expiration of six days from its first appearance, no excoriations having taken place. Quinine was continued throughout the electrical treatment. All hyperidrosis ceased after the third application of electricity, and the eruption disappeared very rapidly.

I have been led to present this case as one more illustration of the neurotic relation and origin of true zoster, and also as an example of the successful use of the electric current in the treatment of skin diseases either dependent on or in connection with diseases of the nervous system.

Trifling as it may at first appear in its clinical features, it strikes me as worth recording, if it should lead to nothing more than adding another example of the very important and close connection of many dermatological lesions and disorders of the nerves, and in the successful treatment by electricity long so potent in purely nervous diseases, but which now is beginning to claim so high a place in cutaneous therapeusis.

SAN FRANCISCO, CAL., 104 Montgomery St.

Progress of Medical Science.

GALVANO-PUNCTURE SUCCESSFULLY USED IN ANEURISM OF THE FEMORAL.—Dr. Hauck reports the following interesting case. The patient, a man forty years of age, presented himself with a round tumor five inches in diameter, situated at the middle and inner side of the left thigh. A pad was first applied, and then digital compression, but both plans failed. It was then decided to use the galvano-cautery. Three platinum needles, connected with the negative pole, were plunged two inches deep into the sac, their distance apart being half an inch. The circuit was completed by attaching the positive pole to a metallic plate placed above or on the surface of the tumor. The continuous current was thus employed for about twenty minutes. After the second day the tumor became softer, and three clots of blood, each the size of a pigeon's egg, were felt. The pulsation and murmur had diminished. Five days afterwards the same operation was performed on the other side of the sac. After eighteen hours no pulsation or murmur could be detected, but there was inflammation, the pain being very great. Ice was ordered, but being applied too energetically by the attendant, gangrene of the skin resulted, a portion of the skin sloughing away in a few days, and with it the covering of the tumor. A large coagulum was thus exposed to view, and extending over it was the saphenous vein, which, stretched by the mass of blood, accounted for the intense pain. This also broke away, and a mass of coagulum was brought to view, which was gradually removed to the extent of about three ounces daily. The hemorrhages were controlled by ice. The cavity, after being cleansed, was filled with charpie-balls dipped in a solution of salicylic acid. This treatment was continued for six days, when the Doctor removed the coagulum in all directions, and he thinks the mass did not weigh less than two pounds. Five months after the operation, the wound was entirely healed, leaving a small contracted scar, slight stiffness at the knee-joint, and some anæsthesia of the lower portion of the thigh and inner side of the knee.—*St Louis Medical and Surgical Journal*, April, 1876.

OTIS'S OPERATION IN THE TREATMENT OF INCIPIENT STRICTURE.—Mr. Berkeley Hill, of London, has devoted a clinical lecture to discussing the chief points brought forward by Dr. Otis in reference to stricture of the urethra. Within the past year Mr. H. has measured ninety five urethræ, all of them with some urinary disease, and in only three did he find the meatus as wide as the rest of the canal. The measurement of these urethræ has been under-estimated, and he thinks Dr. Otis is correct in claiming larger calibres for that canal. He has not, however, found the distensibility to be uniform from the bulb to the meatus. The urethra is widest at the bulbous part, and remains of an even width for about two inches, and then it gradually narrows, and for the rest of the canal it is about three millimetres less, the narrowest portion being at the outlet. This, he says, agrees with the description of anatomists, except that the distensile capacity of the urethræ, measured in the living body, showed greater limits than they set down. The spongy urethra is conical in shape, resembling the tapering nozzle of a syringe, which is designed in this way, probably for the conduct of the semen. That stricture in any shape is the sole cause of gleet, he rather doubts, though doubtless it is the most frequent condition. His own experience does not support the statement of Dr. Otis that strictures are generally met with in the first inch and a quarter of the urethra. In sixty-three cases examined by bulbous sounds, Mr. Hill found forty-three to be between four inches and one half to six inches. In one hundred cases published by Dr. Otis, thirty-one patients were found without contraction, when examined a considerable time after the operation. Fifty two others were not examined, but reported themselves as well; the remaining seventeen were not quite cured, though relieved. This evidence induced Mr. Hill to give a trial to this method. He took sixteen cases of long-standing gleets, with one or more contractions in the spongy portion of the urethra. Dr. Otis operated upon one, and Mr. Hill upon the remaining fifteen. In five cases the gleet ceased after the operation, and the patients were cured; but of these five the operation proved serious to two, one having hemorrhages for three days, and the other three attacks of rigor. Of the remaining eleven, among which was Dr. Otis's case, the gleet persisted in all; in this last case being cured by other remedies. Mr. Hill advises the avoidance of the use of instruments whenever the gleet has been of short duration. The exact length of time that indicates stricture is uncertain, but as a rule the canal should not be searched when the discharge has only lasted six months.—*The Lancet*, April 8, 1876.

TORSION OF ARTERIES.—Since 1871, M. Tillaux has not ligated the arteries in his operations, and in over one hundred major operations, in which he has employed torsion, he has not had a single case either of primary or of secondary hemorrhage. In a memoir on this subject, read before the *Société de Chirurgie*, he draws the following conclusions:

1. Torsion is applicable to all arteries, and especially to the large ones.

2. Only one pair of forceps is required for the operation.

3. The artery should be seized obliquely, and not perpendicularly to its axis.

4. The torsion should be continued until the end seized by the forceps is detached.

5. It is useless to limit the torsion; it confines itself to the portion seized, or, at most, to one or two centimetres beyond this.

6. Atheroma is no counter-indication to torsion.

7. Torsion favors immediate union.

8. Torsion prevents primary hemorrhage as well as the ligature does.

9. Torsion presents a better safeguard against secondary hæmorrhage than the ligature—*La France Médicale*, March 25.

Aquapuncture.—Mr. R. Clemens Lucas calls attention to a number of cases illustrative of the relief derived from this treatment. Dr. Lélut unwittingly employed this simple expedient. His servant had by accident overturned a bottle containing morphia in solution; and, wishing to conceal her misfortune, refilled the bottle with water. The next day Dr. Lélut employed the liquid as a subcutaneous injection for a patient suffering from sciatica, in whose case he had previously injected morphia. The patient was relieved, and the pain disappeared without the nausea that had been excited on former occasions. After finding that the bottle only contained pure water, he repeated the experiment on other patients, and found that it invariably gave them relief, without inducing the unpleasant nausea caused by morphia. As to the manner of injection and the quantity of fluid to be introduced, Dr. Dieulafoy recommends that eight or ten drops of water be injected at the seat of greatest pain, repeated ten or fifteen times at one sitting if necessary. Dr. Lafitte says that he injects two grammes, and then waits a couple of minutes; and, if the pain be not relieved, then injects two grammes more.—*The Lancet*, March 4, 1876.

Meningitis and Ergot.—Dr. Sumrall writes us that he has come to the conclusion that deaths produced by compressed air are not caused by super-oxydation of the blood, but by meningitis. Immediately after the removal of pressure, in such cases, the vascular system dilates to its utmost, though the intercranio-spinal portion of it cannot, from its situation, dilate proportionately. The result is that this latter current is slowed, while that in the arteries and veins of the rest of the system is increased.

The result of this slowing is meningitis, and the rational treatment consists in restoring the proportionate calibres of the vessels. This may be accomplished by ergot. Of five cases of meningitis treated by other methods all died, while of seven who took ergot all recovered. His diagnosis in such cases was: Vascular dilatation, the result of a neurosis. The fluid extract was the form used, and it was given in drachm doses, repeated at suitable intervals.

Convulsions Arrested by the Sinistro-Lateral Posture.—Dr. F. J. Brown has seen two cases of convulsions arrested by turning the patient over upon the left side. One patient, a man, with Bright's disease, had uræmic convulsions, which ceased instantly after he had been turned upon the left side. Another man who had been seized with unilateral convulsions, was relieved in fifteen seconds after turning upon the left side. Dr. Brown's theory is, that this posture is in some way beneficial by favoring the heart's action.—*The Practitioner*, April, 1876.

Unusually High Temperature in a Puerperal Patient.—Dr. S. W. Torrey reports a case of this kind occurring in a primipara, who was delivered naturally of a healthy infant. For two days after confinement her condition was normal, the temperature being 99°. On the third day, she was found restless and with tender breasts. She had not slept the previous night, owing to the severe pains from prolapsed piles. Pulse 106, respiration natural, tongue moist, with temperature under tongue at the end of three minutes of 108°, and at the end of five minutes 108.5°. A mass of piles were found protruding from the anus; they were not inflamed, and were returned by gentle manipulation. There was neither nausea, pain in the abdomen, nor any sensitiveness over the uterus upon pressure. Ten drops of veratrum viride, and ten grains of Dover's powder were administered. The next morning the temperature was 100°, the milk flow was established, and there were no symptoms of metritis or peritonitis. The doctor regards the unusual high temperature as due to the irritation of the piles, increased by the milk fever.—*Boston Medical and Surgical Journal*, April 20, 1876.

Treatment of Arthrepsy.—M. Parrot has recently devoted a series of lectures to this disease of infants which has its origin in the digestive canal, and leads to a profound disturbance of nutrition. The symptoms are, in the first stage, altered fecal discharges, great thirst, and, despite the frequence of nursing, diminished absorption of milk. In the second stage, the passages become more and more unhealthy, and vomiting sets in with thirst, buccal ulcerations, diminished appetite, emaciation, and loss of strength. In the third stage, the child is past hope. It can only drink from a spoon, the vomiting is more frequent, the respiration difficult, the temperature lowered, the skin wrinkled, the aspect aged, and the flesh has a peculiar tallow feel. Rigidity and immobility of the limbs set in, and finally coma, or sometimes convulsions, precede death.

In the treatment of this disease, if any artificial nourishment be required, Mr. Parrot prefers cows' milk, pure and undiluted, which he gives in regulated quantities. After the sixth month rice or arrowroot preparations may be added. When diarrhœa and cough or coryza are present, the amount of milk given at each nursing is diminished, and heat and gentle rubefacients to be applied to the abdomen. If the diarrhœa persists, two grains of bismuth subnitrate are given in syrup of quinces six or eight times a day before nursing, lime-water being added if the discharges are green. When fever is present with a coated tongue, it is good to begin with an emetic; and when the discharges are mucous, a purgative is advisable. When the arthrepsy is acute and the condition of the patient becomes grave, three or four drops of cognac in eau sucrée, and a teaspoonful of bouillon, both iced, are given alternately every ten or fifteen minutes, and a hot mustard bath is ordered twice or three times day, followed by frictions, and the body is then wrapped in wool. If improvement sets in, these measures are less frequently used, and a gradual return to a milk diet is made.

In the more chronic forms of the disease, the stimulation must be less active; frictions are to be substituted for baths, milk to be given with a spoon; and six times a day, after feeding, a half teaspoonful of elixir of pepsine, which at the same time aids the digestion of the milk and is a stimulant to the stomach, administered.—*Journal de Méd. et de Chir.*, April, 1876.

The New Jersey Pharmaceutical Association held its regular annual meeting at New Brunswick, N. J., on May 17.

The New York Academy of Sciences propose to form field parties for scientific excursions into the suburbs.

The mortality rate of this city has very sensibly decreased within the last six weeks.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, May 27, 1876.

THE ENGLISH DEBATE UPON THE PATHOLOGY OF SYPHILIS.

II.

HAVING in our last issue given a general outline of the opening paper of Mr. Hutchinson upon the Pathology of Syphilis, before the Pathological Society of London, we shall now give briefly the main arguments of the various speakers. The discussion was commenced by Mr. Henry Lee, who favored his audience with one of his choice specimens of clouded argument, expressed in sentences almost, if not wholly, unintelligible. He did not agree with Mr. Hutchinson that gummata are sequelæ, and regarded them as due to blood disease, but he offered no facts. We commend to our readers the half of his speech, in which we presume, still we are not certain, that he was speaking of the differences between the two forms of venereal sore, as one of the best examples of turgid thought and involved language with which we are familiar in medical literature. Dr. Drysdale alluded, in a general way, to the doctrine of dualism, and expressed his own conviction of its truth, as shown by the differences in the two forms of venereal sore. He thought that Mr. Hutchinson was wrong in regarding it as dead, seeing that it is generally accepted on the continent. He regarded gummata as tertiary lesions, and caused by a blood state. He further stated the interesting fact that the keratitis of hereditary syphilis, described by Hutchinson, was looked upon as caused by scrofula by Fournier and Verneuil, who had informed him that they seldom saw it in France. In his practice, he had met with cases showing visceral affections in the secondary period of syphilis. It is evident that the formal opening of the debate devolved upon Sir James Paget, who was the first speaker at the second meeting. We can only express our surprise and regret at this performance of this eminent man, as his speech was long and turgid, and in many particulars his comparisons were flimsy and badly established. He looks upon syphilis as a specific fever due to blood disease, which is persistent, but diminishes in intensity by age. He thinks that the symmetrical distribution of lesions is always expressive of a blood state as cause; and that as the condition wanes, the expressions thereof become unsymmetrical. According to this view, gummata are not simply sequelæ. The similes offered by Sir James as existing between the sequelæ of syphilis and those of ague and typhoid fever are simply absurd, and show that he has not studied this question with his usual profundity. He is likewise weak in his effort to bolster up the view of Mr. Hutchinson, that tertiary lesions may be due to local morbid impress left by the earlier processes of the secondary period, as his comparison between them and the lesions, such as leech-bites and lividity of the arm, which he personally experienced, are entirely without foundation. Sir James applied leeches to his sprained wrist, which left scars. While well, these scars showed no abnormality, but when ill health supervened they became inflamed and ulcerated. In this case, there was simply a tissue debility, not due to a pre-existent morbid poison in the blood, as in the case of tertiary syphilitic lesions, which was aggravated by a lowered condition of the general nutrition, and nothing else. The only really valuable remarks of Sir James were those upon the relation of syphilis to gout, tuberculosis, and scrofula. He stated here, as elsewhere, that syphilis may predispose a subject to tuberculosis, and modify and complicate gout and scrofula. He thinks that the soil in which syphilitic poison is sown, or rather the peculiarities of constitution, tend to cause the varying appearances of the lesions; and while he admits but one virus as producing syphilis, he does not appear to make a distinction between the two varieties of sore. The remarks of Dr. Wilks are, on the whole, more unsatisfactory than those of the previous speaker, a fact which is surprising when it is remembered that he has been one of the foremost investigators in England into the nature of visceral syphilis. His speech was also very long, and too general in character. He truly remarked that there is no disease like syphilis in our nosology, but that it is a counterpart of other febrile diseases. He utterly rejects the terms secondary, tertiary, and quarternary as applied to syphilitic lesions, but unfortunately does not offer any clearer division. He fully admits the occurrence of visceral lesions in the secondary period, as he has seen such, and asks for more observations on the subject. He calls attention to a fact, not generally stated as being observed by himself, that frequently, when in syphilis the viscera are quite early affected, the outward manifestations of the disease are very insignificant, in comparison, and *vice versâ*. He also had observed that the infiltrations of syphilis did not, as a rule, suppurate, and that often, even when they had softened and fluctuation was felt, complete absorption might ensue. He endeavored in a labored argument, to draw a clear analogy between

syphilis and small-pox, but really did not add one idea to our stock of knowledge. He concludes his remarks, which occupy four closely and finely printed columns of the *British Medical Journal*, with the statement that, to his mind, the lesions of syphilis and scrofula were distinct and readily recognisable the one from the other. The remarks of Dr. Hilton Fagge were noticeable for their comparative brevity, a quality in general foreign to the discussion under consideration. He alluded to the point overlooked by Mr. Hutchinson, namely, the relation of syphilis to amyloid or lardaceous degeneration. According to Dr. Fagge, syphilis and prolonged suppuration are the only causes of this condition, and so strong is his opinion upon this point that he states that if at post-mortem he finds it without evidences of suppuration, he is confident that the patient was syphilitic. He evidently thinks that syphilis has no specific action in producing this degeneration, but that it is caused by the debilitating influence of the disease upon the general nutrition. He thinks that the lesions of the lungs in syphilities are caused in the same way, and that they are due to diffuse inflammatory changes, rather than to a definite or specific morbid growth. He holds the view that syphilitic eruptions are specific and readily recognizable, and that simple eruptions may exist on the skin of syphilitic subjects without being modified or losing their essential characteristics, even when the patient is subjected to anti-syphilitic treatment. Mr. Berkeley Hill's remarks were general in character, and fortunately not prolix. He thinks syphilis is a blood disease from first to last, and transmissible even in the later stages to the offspring. He further lays stress on the fact that children who have inherited syphilis from parents afflicted with tertiary or late syphilis, may communicate the disease to others, such as their nurses, in its most active and typical form, as being a powerfully affirmative argument. The fact that late lesions require for their cure anti-syphilitic remedies, is regarded by him as being proof that they are similar in nature to the earlier ones, which are undoubtedly due to a blood state. He thinks that Mr. Hutchinson attaches too much importance to the significance of symmetry of distribution of eruptions, and that in syphilis they are generally less symmetrical than in the other more acute diseases. He says the body generally is covered with an eruption in the early stages; this is succeeded by a more circumscribed rash; and lastly, this fades away until there may be one, two, or three patches on either side of the body. This statement, which is based on observation, really places the matter in a simple and intelligible form; it is really the practical illustration of the question of abundance alluded to by Mr. Hutchinson, but by him explained, as we know, in another way. Mr. Hill expressed himself quite clearly as to the variations in the type of the disease. He fully endorsed Sir James Paget's view, that the soil in which the virus is implanted is mainly the determining cause of the course of the disease; but added that perhaps the source of the contagion might also exert an influence. Thus he was disposed to think that the disease might be severer in its course when derived from a person in whom it was in an active form, and lighter when the contagion was waning in intensity. He did not accept the dictum of the orator that dualism is dead. Mr. Hill was followed by Mr. De Meric, whose remarks were terse and pointed. Without entering into a consideration of the doctrine of dualism, he asserted his belief that it was well founded. As to the analogy between syphilis and the specific fevers, he thought it perfectly correct with certain modifications as to variola only, and hinted that as regards the others, it was somewhat forced. In his experience phagedena was an exceptional occurrence, rather than the usual one; and he did not go as far as Mr. Hutchinson in saying that it was always due to syphilis. He adhered to the division into the stages, or periods, which are generally recognized; and hinted that Mr. Hutchinson had not simplified the matter by considering the disease as having but one stage and sequelæ. He thought that the symmetry spoken of by the orator did not exist as widely as it was claimed it did; and that it was impossible to place, as the latter wished to do, every lesion in mathematical order. Tertiary lesions showed a decline in the disease, hence they were the results of a blood state. He differed with Sir James Paget as to the simile of the leech-bites. Although Mr. De Meric did not express himself distinctly, it is to be inferred from his remarks that he thinks that syphilis may predispose a patient to the development of struma, and that both conditions give rise to different and recognizable lesions. We shall consider the views of other speakers, and the reply of Mr. Hutchinson in our next issue.

THE AMERICAN MEDICAL ASSOCIATION AND THE INTERNATIONAL MEDICAL CONGRESS.

In a few days the meeting of the American Medical Association will be held in Philadelphia, and in a few months that of the International Medical Congress. Be this order of exercises the result of chance or of prevision it is quite fortunate, since it gives to the former society the time to prepare its action on the latter, an action which will, in a measure, serve to settle the opinion of our transatlantic and transpacific confrères on our own professional merits. The apparently selfish aspect of the question is justifiable in view of the results to be obtained. Our success in the estimation of the foreigners will depend, not so much on the intrinsic value of the papers chosen to be read in Congress as the representative of American ability, as on the international direction which our leading men will, or will not, give to this medical-world conference.

The American physicians will not be judged so much on their lectures, as on their influence in the discussion of the questions most directly medico-international; just as the value of the next International Medical Congress will not reside in the individual value of the individual papers read on particular topics; but on the directness with which such papers and the discussions thereon will tend to increase the inter-communication, the inter-understanding, and the inter-coöperation of the physicians of all nations.

The task of elaborating this idea, and of bringing it into execution in the next congress with due authority and force, seems to devolve upon the American Medical Association, in virtue of its position, and by the uncontestable right which priority gives. For, by position, the American Medical Association is the only body here constituted to speak and to act in the name of the profession at large; whilst by its antecedents it has acquired the right to continue an action which it has initiated. It must be remembered that the American Medical Association sent abroad the first delegates who, in 1873 and 1874, invited the British Medical Association, and the French Association for the Advancement of Sciences, to coöperate in the project of establishing, among the physicians of all nations, a uniformity of plan for the study of disease by exact instruments, of scales, of records of observation, and a true common scientific language. It was also the American Medical Association which sent its delegates to Bruxelles in 1875, in order to introduce the same proposition before the International Medical Congress. There they found, in the section of ophthalmology, a proposition similar to their own, but restricted to a single point in the paper of Dr. Deltanche, "Upon the means of measuring the hearing and recording its degrees in a uniform manner in all countries." This limited application, in 1875, of the broad principle first enunciated by the delegate of the American Medical Association to the conferences of London, of Lyons, of Norwich and of Lille, constitutes the only foreign antecedent prior to the action which will be taken in the matter before the International Congress of 1876.

These precedents create, in favor of the American Medical Association, a right of pre-emption upon this great issue, which no medical organization at home nor scientific body abroad can contest; and which it would be more than a blunder to relinquish on the eve of the final success of International action.

Upon the strength of such antecedents, and by its own national and representative organization, the American Medical Association is entitled to be represented in the International Medical Congress by a strong delegation, especially charged to concert and to urge the adoption of the means of uniform observation so desirable in the scientific world.

Once this determination made, the chosen delegates will see the now rather vague ideal set before them take a substantial reality.

The first thing to command their attention will be the want of a common or uniform language among physicians. The idea of restoring the Latin to this, its former position, could not be mooted a moment, since Latin justly lost its position as international interpreter when it became the detective-agent of the Congregation of the Index for the destruction of the works of Galileo, Luther, Erasmus, Espinosa, etc. Besides, though strong in dialectics, it proves powerless to express the data of modern positivism.

On the other hand, if the modern languages are not found much better interpreters of positivism than the Latin, it has become apparent that the *universal language* so desirable for the interchange of scientific ideas is not so much to be looked for in the general adoption of *one* language, as in the agreement upon a technical uniformity of nomenclatures, of scales, forms of record, of observation, etc. The unity of mathematics throughout the western world, though founded at the time when the greatest diversity and confusion of language prevailed, was not restricted to the Arabic; but expressed itself in algebraic and arithmetic symbols, and became perforce the common language understood to this day by the mathematicians of all countries.

So will it be with the language of physicians. The Latin unity can no more express their advance, and each modern language proposed as a substitute would be subjected to the same ostracism by the others. But happily the language of positivism, expressed by figures, formulas and symbols, and exactly expressing the data obtained by the use of the instruments and methods of modern investigation, is ready to establish the uniformity and the unity of medical sciences. The difficulty of the enterprise does not reside in the complexity of the problem, but in our being unused to face it. Let us front it, and it is ours.

We know very well that nomenclatures differ all over the world. Simple drugs, pharmaceutic preparations, diseases even, and the very parts of our own body are known, or rather disguised, under different names. The status of a patient is seldom mathematically established from the first. One physician insists on some points, another on others. Instruments, scales, tables of record differ; hence most of the monographs commence—if they do not finish also—by descriptions from memory. This initial, or total absence of mathematical data, unfits the observations for becoming parts of the statistical elements of the numerical method. The differences between the scales and records used render the grouping and the comparison of cases impossible, and favor the predominance of imagination in diagnosis.

We desire to urge the matter of uniformity of system in observation and registration, because we believe that the general adoption of such a system

will be the only means of substantial progress, in fact one of the prime necessities of the present age.

As no body of our countrymen and confrères can have the authority to plead the cause of uniformity of observation before the coming congress equal to that of the American Medical Association, let its delegates be watchful that the international interests be not silenced in Philadelphia by simply interesting topics. On the contrary, let general, and, above all, international questions, be everywhere accorded the precedence. All the ideas advanced must present an interest commensurate with the radius of their auditorium. If this can be done it will be accounted a lasting honor for the American physicians to have taken before the other nations the initiative and the leading part in the restoration of the unity and uniformity of language in physic—the most momentous instrument of future progress.

It is written that the builders of the Tower of Babel dispersed when they ceased to understand each other. The lessons of their experience should not be lost to us. Already there is commencing a confusion of language, and a misinterpretation of ideas; these will increase with the progress of our work, and the sooner we agree upon some common understanding of necessary terms, the better. In this view let us hope that the opportunities of the meetings in Philadelphia may not be lost.

THE SHORT-TERM SYSTEM.

A WRITER in the *New York Times*, with the desire of informing the public concerning the present status of medical education in this country, denies the possibility of students receiving degrees from reputable medical colleges nine months after the commencement of their studies.

The writer says: "The burden of the complaint made by the RECORD against these outside schools is that they shorten the time of study. From an inquiry into the facts of the matter we learn that the requirements for graduation in the great majority of the schools are three years' study and attendance on two full courses of lectures. We also find that some of the schools referred to by the MEDICAL RECORD as being lax in this part of the law, are in reality very particular in compelling students to fulfil the requirements. The RECORD seems to charge that some of these schools permit students to graduate before completing the time of study required by law. We can find no evidence of the existence of any such irregularity. The editor of the RECORD will find it hard to persuade laymen to believe that it is all wrong for students to attend a Winter course of lectures and then a Summer course immediately after, while it is all right to attend a Summer course of lectures and then attend a Winter course after."

Certainly no one who pretends to know anything of the actual requirements of medical education will presume to claim that shortening the time of study is not a just and reasonable cause for complaint. We fully admit that the great majority of the schools insist upon two full courses of lectures and three years of study, but we are hardly willing, in view of facts before us, to believe that we are wrong in supposing that a student may get through in less time. The mere statement that this writer has not found any evidences of the possibility of the latter condition of things, proves nothing more than his culpable ignorance of facts and a general lack of information concerning his subject.

It seems hardly possible that the author of the article, pretending as he does to understand the principles advocated by the RECORD, should be so ignorant of what has lately appeared in its columns. As the result of a careful examination into the whole matter, he has come to the conclusion that all our efforts in connection with the discussion of the short-term system have been directed towards crushing out a few of the schools outside of New York City, in order to increase the size of some of the classes of some of the other overcrowded institutions. Preposterous and ridiculous as this assertion is, it is made with all the seriousness of one who wishes to be understood as speaking what he believes to be the truth. The very transparent attempt to pervert our meaning in regard to attendance upon Summer and Winter courses, is another evidence of his fitness for impartial criticism. It is hardly worthy of notice, except in connection with an ardent desire to create a false impression upon the outside public. We do not care how much our course may be criticised, but we have a right to object to wilful misrepresentation.

The student can attend as many courses of lectures as he pleases, the more the better, provided he gives himself time and opportunity for mental digestion. We care not when he attends them, nor where, whether in summer or winter colleges—but we object to the crowding of two full courses into one year, with the view of cutting short the term of study required by law. We have not the least doubt that this is often done, generally without the knowledge of the different faculties, it is true, but sometimes with their knowledge and connivance. Far from supposing that such things are impossible, we believe that half the so-called corruption in high places has not yet been exposed, and that the continued discussion of the short-term system may cause some still more astounding disclosures.

THE MEDICAL ASPECTS OF THE CENTENNIAL.

ONE of the attractive features of the great Exposition at Philadelphia, will be the important influence it must have in disseminating information upon special branches of science and art. Each department will be placed on an elevated position of æsthetic taste and cultivated skill, and will afford to students who desire

to embrace it, a rare opportunity for improvement and permanent benefit. The domain of Medicine occupies a comparatively modest niche in the grand display, but it presents numerous interesting points for description and discussion, which deserve careful study. Impressed with the desirability of affording our readers an insight into the various attractions here offered to the medical profession, we propose to publish frequent contributions from a special correspondent in Philadelphia, who will endeavor to give a faithful sketch of those portions of the Exposition, and of the salient features of current events in the Centennial City, which may especially interest medical men. The first letter of the series will appear in our next issue.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, May 4th, 1876.

DR. S. S. PURPLE, PRESIDENT, IN THE CHAIR.

EPIDEMICS OF THE CENTURY AND LESSONS DERIVED FROM THEM.

DR. GOUVERNEUR M. SMITH read an interesting paper upon the above subject, in which he made a comprehensive survey of epidemics occurring between 1776 and 1876.

Brief reference was made to the philanthropic labors of Howard, who died in the latter part of the last century while in search of the cause and efficient remedy for the plague.

DR. ELIHU H. SMITH, who was nineteen years of age at the time of Howard's decease, was associate editor of the first medical periodical published in this country, and wrote the first paper which appeared in the journal. The title of his paper was, "The Plague of Athens," and in it can be found the remarkable statement that if local causes originated the plague at Athens, local causes might develop yellow fever in Philadelphia and New York. Dr. Smith died of yellow fever in 1799, the year following the publication of his paper.

DR. SMITH made a general reference to the sources and methods of transmitting disease, and the gradually increasing facilities for their discovery, both of which seemed to have been attendants upon advancing civilization. Following closely upon the discovery of new sources of disease, there have been found new prophylactics; and the discovery of those had been, in a good degree, commensurate with the demands for protection against the deleterious influence of newly discovered noxious agents. The doctor classified epidemic diseases under three heads, viz.: the contagious, the infectious, and the meteoracious. Under the first head were placed variola, measles, scarlatina, and varicella; under the second, typhus and typhoid fevers, malarial affections; under the third, influenza, typhoid, pneumonia, and erysipelas. Cholera and diphtheria, while contagious affections, seemed to a limited extent to be spread by meteoracious influences. There was an intimate relationship between the modes of prevalence of epidemic disorders. Some of the diseases at times being apparently diffused in two ways, *i. e.*, by specific germs, and by a somewhat wide-spread atmospherical diffusion of such germs. The present accurate manner of studying the subject would shortly enable the nosologist to make a more thoroughly scientific classification of epidemics than any hitherto attempted.

This classification, it was allowed, was not absolutely correct, because the processes and status of several of those disorders remained questionable. The classification had been retained for special reasons, and the doctor had placed cholera among the meteoracious diseases, but had accompanied the assignment with the following qualification. Under certain circumstances the atmosphere might become so impregnated with cholera poison that the disease might be communicated through that medium, but just how far cholera could be carried through the atmosphere had not been established. He believed it to be a contagious disease.

Of the specific nature of the poisons which have developed epidemic diseases there was entire ignorance; but, while our ignorance might be deplored in that respect, yet we might be assured and feel conscious, that through the medium of our increased knowledge of hygiene and prophylaxis, we should be able to disarm many of them of their destructive power.

Epidemics of small pox could be prevented, and measles and scarlatina, when they appeared, did not always become wide-spread, for two reasons: 1, because atmospherical conditions did not always favor their diffusion; and 2, when their diffusion was favored, increased vigor in adopting prophylactic measures was likely to check their spread.

Science had failed to find any specific cholera germs, and yet epidemics of cholera could be controlled by hygienic measures. By means of proper protective measures erysipelas and puerperal fever could be eradicated when once they had appeared.

Special reference was made to the study now in progress in relation to microscopic vegetable growths, and stress was laid upon the parasitic origin of several of the epidemics which had been considered.

Attention was directed to the fact that in war disease had slain more than the sword. In that connection, Dr. Smith referred to the lamentable loss of life which was caused by preventable diseases occurring in the Crimean army. Reference was also made to the labors of sanitarians and the adoption of sanitary measures during the late war in this country, together with the most gratifying results which were realized from labors for the protection of our soldiers from disease. The medical history of our war had shown that insalutary places could be made comparatively salutary, but such results had not come from the use of medicinal agents, so much as from the vigorous adoption of wholesome hygienic measures.

With regard to hospitals it had been demonstrated that light, air, speedy removal of refuse, and intermittent occupancy, were essentials. The doctor argued in favor of establishing local, state, and national boards of health.

The paper was closed by a reference to disinfectants, which were grouped under three heads:

1. Those which destroyed organisms;
2. Those which absorbed noxious elements;
3. Those which decomposed the poisonous compounds.

The paper was listened to with marked attention; and being open for discussion.

DR. ELISHA HARRIS spoke at some length concerning the benefits which had followed the study of epidemic diseases and the adoption of measures for their prevention. He regarded cholera as one of the most

controllable diseases with which the human family was afflicted, as it advanced only as transmitted by human carriers. The observance of certain rules of hygiene had excluded typhus from our armies, and the resources of prophylaxis had prevented the prevalence of typhoid fever in our country as it formerly had prevailed. He also referred to the report made by Klein, in which it was claimed that the nature of the poison that produced typhoid fever had been determined, and that it consisted of a microphytic growth, which attacked the follicles of Lieberkühn and Peyer's patches. By the simple process of growth, an erosion was produced, and upon the eroded surface the growth continued to increase with great rapidity.

Dr. J. C. Peters remarked that scarlatina was doubtless a filth disease. The plague of Athens had been proven to be an epidemic of malignant scarlatina developed by the filth incident to the extreme overcrowding of the city at the time of its prevalence. Dr. Peters spoke at some length upon the circumstances attending the introduction of yellow fever into New York, and believed that this fearful malady could be eradicated from Havana by cutting a canal which should properly drain that portion of the bay that received all the sewage of the city.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, May 5th, 1876.

Dr. E. G. Loring, President, in the Chair.

ON THE MANAGEMENT OF THE PROLAPSED ARM IN TRANSVERSE PRESENTATIONS.

Although the principal object of the paper read by Dr. Frank P. Foster upon the above subject was to call attention to a particular method of management, yet he regarded it not unprofitable to give a general review of the doctrines which have been taught relating to the question under consideration. The doctor succeeded in giving a most complete and thorough analysis of the views entertained by all the more prominent obstetricians concerning the advantages and disadvantages of a prolapsed arm; concerning replacement and retropulsion; concerning traction and the use of the fillet; scarification and brachiotomy. The real point of interest in the paper, however, related to retropulsion of the arm, by which was meant, not merely replacement of the arm, but elevation of the entire cephalic pole of the child by pushing upwards in the line of the humerus. In the case related the above manœuvre was assisted by external manipulation. The doctor farther believed that when the shoulder was lifted, and with it the entire cephalic pole of the child, in the manner indicated, it then became a matter of indifference which foot was seized for the completion of version, in case the old operation should be found necessary. Another original recommendation made by the doctor was that in cases in which cephalic version was attempted, the arm be first replaced within the uterus, and then traction made upon it *in a lateral direction*, away from the head. Dr. Foster raised a general objection to the use of the fillet, on the ground that the unnecessary introduction of any substance into the cavity of the uterus, especially such fabrics as fillets were liable to be made of, was objectionable. The paper being open for discussion, Dr. Gillette remarked that he regarded it a matter of the greatest importance as to which foot was seized in performing the operation of version. He maintained that it was important to seize the foot opposite to the plane of the body presenting. In a pelvis of ordinary size, he believed that replacement of the prolapsed arm was not called for, unless the size of the accoucheur's arm rendered it necessary. He argued in favor of resorting to manual interference at once in case of prolapsed arm, not waiting for spontaneous version, which rarely if ever occured. He regarded the use of the fillet as a dangerous procedure, for it might be the cause of bringing the arm behind the head, instead of making it a reliable guide. He had never experienced any difficulty in delivering the arms when he had managed his cases in the following manner: the body of the child should be bent up under the pubis, and the posterior arm removed first, and then it should be bent back over the perineum, when the anterior arm could be liberated with ease.

Dr. Mundé related a case in which it was found impossible to reach the opposite leg of the child, and he was compelled to deliver by attaching a fillet to the limb that could be reached, pushing up with the other hand, and calling to his aid external manipulation by means of an assistant. The delivery was effected after about half an hour of hard work. The membranes had been ruptured for some time. He objected to the views of Dr. Gillette relating to the easy removal of the arms. His experience had been that, although the posterior arm should be first delivered, and ordinarily could be without difficulty, the anterior arm could not be so easily liberated. His plan of operation had been to first liberate the posterior arm, the body of the child having been pushed firmly against the pubis, and then to turn the body of the child completely around, when the anterior arm became the posterior and could be delivered in the same manner as the first. Replacement of the arm he regarded as unnecessary.

Dr. Gillette remarked that he could understand how difficulty might arise in delivering the arms in a primiparous case with contracted pelvis and large child, but that in a pelvis of ordinary size and cases of labor in general, he had experienced no difficulty whatever, when operating in the manner described. In all obstetric operations the woman should be anæsthetized, and her hips brought to the edge of the bed, for then the woman was in the most favorable position for the operation.

Dr. Munde remarked with reference to retropulsion, as described by Dr. Foster, that he could understand how it might be available in a relaxed uterus, and where the membranes had but recently ruptured.

[Dr. Foster's paper will be published in full in the *Journal of Obstetrics.*]

Quarantine Regulations.—The new regulations of the French Quarantine department are classed under the following heads:

Art. 1.—Cholera, yellow fever, and the plague are the only exotic contagious diseases, which in France demand the constant application of sanitary measures against the exports of the countries where these diseases prevail.

Art. 2.—Other dangerous, transmissible, and importable diseases, especially typhus and variola, may at any time be the object of exceptional precautions; but in this case the measures are only to be directed to the contaminated exports.

Art. 3.—Precautionary measures may always be adopted in the case of any vessel the hygienic conditions of which are considered dangerous, whatever may be the nature of its freight.

Correspondence.

SALICYLIC ACID IN RHEUMATISM.

To the Editor of The Medical Record.

Dear Sir:—My attention having been called in March last to the almost marvellous results accruing from the use of salicylic acid in the treatment of acute rheumatism, and believing in common with those who have recently recorded in your pages a successful trial of the same remedy in this hitherto unmanageable disease, that the accumulating experience of the profession with this treatment should be promptly reported, I am induced to send you the following brief history of a case wherein the asserted effects of the acid upon swollen and painful joints was displayed with great rapidity and persistence.

Mr. Edward Gordon, recently from Louisville, Ky., an assistant engineer of the D. and W. Railroad, applied to me at my office on the morning of April 25th for treatment of what he supposed was intermittent fever. He stated that a few days before his business called him out on the line of his road, and he was compelled for one night to sleep on the damp ground. The following day he had a chill succeeded by fever, which seemed to persist apparently unaffected by large doses of quinine which he had taken, and on this account he now applied for treatment. By my advice he went immediately to bed, and commenced the usual treatment of remittent fever, which prevails hereabout at this season of the year. The next morning, however, April 26th, he sent hurriedly for me to say that his ankle joints were swollen and exceedingly painful; that he had flying pains through his chest, and was apprehensive lest he was the subject of acute rheumatism, an attack of which he had had several years before, which had confined him to his room *for a period of three months*. He also stated that the disease seemed to be hereditary in his family, many members of which were predisposed to the development of an attack after the least amount of exposure to wet and cold. On examination, both ankle-joints, but more especially the left, were found tumefied, and so acutely sensitive to pressure that even the weight of the bedclothes was complained of. The intercostal muscles also were painful to pressure with the fingers. He had high fever, and was very restless and low-spirited.

The salicylic acid was now commenced in doses of seven grains, given in capsule, every hour, until four o'clock that evening, when the patient reported to me through a friend that he had a constant burning pain in his stomach, which had refused to retain more of the capsules, but that he was *almost entirely free of pain*. I called immediately, and found that he could move his joints with but a small degree of pain, and that the chest pains had also disappeared. He took ten grains of Dover's powder at bed time, and rested comparatively easy until four o'clock A.M. when the pain in the ankles (now more severe in the right joint) returned with all its original intensity. At seven o'clock A.M. the acid was again ordered, and being now better borne by the stomach was unremittingly given every hour up to six o'clock the same evening, when the joints were discovered to be *thoroughly painless, free from swelling, and could be moved in any direction without the slightest discomfort or inconvenience*. The capsules were continued the following morning, but only four doses were taken at intervals of two hours. The patient, by my instructions, remained in bed the 29th and 30th April, and without my consent made his appearance on the streets the next day, May 1st, but has not in consequence of his disobedience suffered any farther trouble from his malady. He called today to express his gratitude and great astonishment at the rapid and beneficial effects of salicylic acid, which he says is *the* remedy for acute rheumatism. May we not indulge the hope that in this opinion our patient is correct, and that as Stricker has intimated, "a real remedy for rheumatism has at last been found"

Truly yours,
Henry K. Leake, M.D.

Dallas, Texas, May 4, 1876.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from May 14th to May 20th, 1876.

Goddard, Chas. E., Surgeon. Assigned to duty as Post Surgeon at Fort McKavett, Tex. S. O. 85, Dept. of Texas, May 12, 1876.

Hubbard, V. B. Asst. Surgeon. Assigned to duty at Alcatraz Island, Cal. S. O. 45, Dept. of California, May 4, 1876.

DeWitt, C., Asst. Surgeon. Granted leave of absence for 21 days. S. O. 63, Dept. of the South, May 12, 1876.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending May 20, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
May 15.....	1	6	72	3	46	82	35
May 20.....	2	5	63	3	48	79	32

The Slaughter-House System in New York.—Assistant Sanitary Superintendent James presented a report regarding the condition of the slaughter-houses in this city. In concluding a brief summary of the nature and requirements of this branch of industry, he recommends "that all the slaughter-houses on the east side of the city, objectionable either from construction or location, be closed, and that the others be so altered and improved as to meet the requirements of the ordinance about to take effect."

Alumni of College of Physicians and Surgeons.—A meeting of the Board of Councillors of the Association will be held at No. 4 E. 37th st. this Saturday evening, May 27, at 8 o'clock.

The British Medical Association.—It has now been definitely settled, that the meeting of this Association, for this year, will be held at Sheffield, in Au-

gust next. Dr. De Bartolomé, of Sheffield, has been elected President in place of Sir J. Cordy Burrows, deceased.

Doses in Dispensing Bottles.—An Australian pharmacist indicates on his jars and bottles the maximum doses of the various drugs, in order to enable the dispenser to guard against any mistake by a prescriber.

Second-Hand Papers.—We take this opportunity of informing such gentlemen as are given to peddling their papers from one Society to the other, that none previously read or published will be accepted at the next meeting of the American Medical Association.

American Medical Association.—The next meeting of the American Medical Association will be held at Philadelphia, Tuesday, June 6, commencing at 11 A.M. As far as we can learn, no efforts have been made to obtain reduced rates of fare for members proposing to attend.

British Army Medical Department.—By the Royal warrant dated April 28th, 1876, the Army Medical Department of Great Britain has been reconstructed. A Surgeon-General ranks as Major-General; a Deputy Surgeon-General as Colonel; a Surgeon-Major as Major; and after twenty years service, full pay as Lieutenant-Colonel. A Surgeon ranks as Lieutenant for first six years of service, after which as Captain. Admission to the army is by public competition, and every candidate must possess two diplomas, one to practise medicine, and the other surgery.—A graduation of the army medical school at Netley is equivalent to public examination, and the graduate receives a commission as Surgeon for a period of ten years. The term of medical service is limited to ten years. Every year a number of surgeons not exceeding six, are selected by the Director-General of the Medical Department, to continue in service, and after serving twelve years more are promoted to the rank of Surgeon-Major.

The medical officers have a right to retire on half pay after twenty years' service. Surgeon-Majors are placed on the retired list at the age of 55 years, and Surgeons-General and Deputy Surgeons-General at the age of 60. At the completion of the first ten years of service, if no longer needed, the surgeon receives the sum of one thousand pounds. This constitutes the substance of the conditions of what is to be the short-service scheme.

Medical Schools in France.—A question of a correspondent concerning the number of the medical schools in France has called forth the following reply from the editor of the London *Lancet*.

"The medical schools at Paris and Montpellier have existed for centuries. They are termed Faculties of Medicine, and form part, with Faculties of Letters, Science, etc., of the great institution, comprising the whole country, known under the name of the 'University of France.' The third school (Nancy) is simply the Faculty of Medicine of Strasburg, transferred to Nancy since Alsace has fallen into the hands of the Germans. This Faculty of Nancy belongs, therefore, to the University of France; so also will the Faculties of Lyons and Bordeaux when fully organized. These two latter have but very recently been planned and sanctioned by the Government. As to Lille, it is quite a different matter. In the first place, it should be noticed that lately the French Legislature have allowed free Universities to be founded by the side of the University of France. A few have been started, principally under clerical influence. Among these must be reckoned Lille. But they have hitherto confined themselves to creating Faculties of Theology, of Law, etc., being unable, from circumstances, to add a Faculty of Medicine, which would require facilities for clinics, etc. The free Universities are not as yet empowered to grant degrees or diplomas.

The Exposure of Spiritualism.—A public séance was recently given at Chickering Hall, by Mr. W. Irving Bishop, for the purpose of exposing some of the impositions connected with spiritualism. His hands were bound behind him, and while seated on a chair were tied to a ring in a fixed upright. His head was secured to the same upright by a piece of muslin encircling his neck, and his feet were tied together. While thus secured he rang bells, played on the guitar, drove nails into a board, covered his head with an inverted pail, and performed behind a screen other astonishing feats. The screen being removed the same performances were repeated. The length of hand, flexibility of wrist and trunk, and the looseness of the skin of the wrist, enabled the performer to accomplish these wonders without a great deal of effort, and despite the tight bandages. Notwithstanding his limited opportunity for movement he could bring his hands sufficiently forward, by sliding the skin of the wrist, to manipulate with comparative ease. The performances were under the auspices of the St. John's Guild, and were well patronized. Dr. W. A. Hammond opened the entertainment with an address on the history of humbuggery. He traced it from the dark ages down to the present, giving illustrations of the gullibility of certain confiding individuals, and concluded with an allusion to the differences of opinion among neurologists concerning the value of the ophthalmoscope in the detection of brain disease.

Centennial Medical Congress.—The following gentlemen from abroad will be present at the meeting of the International Congress at Philadelphia in September next, in addition to those previously reported: Dr. Brown-Séquard of Paris, Dr. Robert Barnes of London, Mr. Henry Wilson, Dr. John Barker, and Mr. William Stokes, of Dublin, Drs. Morell Mackenzie, C. B. Radcliffe, and Mr. Wm. Adams, of London.

The Picton County Medical Society, of Nova Scotia, has appointed Drs. Wm. Mitchell, C. H. Munro, and Geo. Murray delegates to the Congress.

Enlargement of the Medical School of Paris.—An investigation of the project for the enlargement of the *Ecole de Médecine* has just been begun in the mairie of the sixth arrondissement; the investigation will last fifteen days. It is proposed to profit by the opening of the boulevard Saint Germain for the enlargement of this establishment, not only by taking in the ground bordering on the boulevard and what remains of the allée Larrey, but also by the acquisition of several neighboring lots.

Weekly Bulletin of the Meetings of Medical Societies.

Saturday, May 27.—New York Medical and Surgical Society.

Tuesday, May 30.—Yorkville Medical Association; adjourned meeting.

Thursday, June 1.—New York Academy of Medicine.

Friday, June 2.—New York Medical Journal Association.

Original Communications.

A UNIQUE CASE OF PROLAPSE OF BOTH VENTRICLES OF THE LARYNX—THEIR REMOVAL BY THE OPERATION OF THYROTOMY—CURE.

By GEORGE M. LEFFERTS, M.D.,

CLINICAL PROFESSOR OF LARYNGOSCOPY AND DISEASES OF THE THROAT, COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

THE following case is, as far as my knowledge extends, *an unicum;* for, although it is true that in laryngoscopic literature two cases of prolapse of the ventricle of the larynx are upon record,* the same condition, in a lesser degree, existing as in the case which I shall describe, in both of them; the lesion was only discovered upon post-mortem examination; and whether or no it had been present during the lifetime of the patient is unknown, the probabilities being, however, that it had not; as no symptoms were reported, which would certainly indicate that so serious a lesion of the larnygeal parts existed, and there being every reason to believe that the prolapse occurred, in both cases, *in articulo mortis.*† In my case, on the contrary, the rare opportunity was afforded of observing and studying the phenomena of this interesting pathological condition during life. I believe it to be, then, the first case in which such a chance has been afforded, and the first in which an operation has been undertaken having for its object the removal of both ventricles of the larynx. These points alluded to as ones of scientific interest, taken in connection with some others which will be detailed in the course of the clinical history, seem to me to render the case one of more than ordinary interest, and make it one which it is desirable to place upon record.

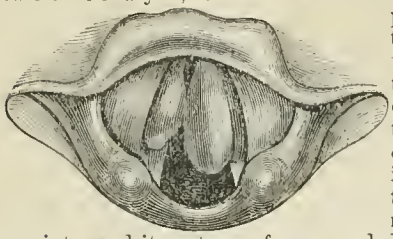
The history, as given by the patient, is as follows: Two years ago he very suddenly lost all use of his voice. Upon retiring one night it was perfectly normal; but the next morning, upon attempting to speak, he found himself completely aphonic. Repeated questionings can develop no cause for this sudden attack; no violence had been experienced, no injury received, nor had he made any unusual strain upon his vocal powers. His voice previously had been good, subject to occasional hoarseness, and he himself to the ordinary symptoms of a chronic catarrhal process of the pharyngo-laryngeal tract, due no doubt to his occupation, which demanded constant exposure. The cause, then, of this sudden onset of his aphonia I am from his history alone unable to determine. The voice having been entirely absent for some three weeks, at the end of that time began to improve slightly, and the patient was soon able to speak in a rough, hoarse whisper, and render himself intelligible to those about him. In this condition it has remained ever since. During the first part of his attack of aphonia, the respiration was only slightly interfered with; but one year later it had become progressively worse, and was then seriously embarassed—stridulous in character and preventing all active exertion—attacks of paroxysmal dyspnœa or laryngeal spasm have never been present; and the only inconveniences, besides the loss of voice and enforced quiet, of which the patient complained, were a constant sense of obstruction in the throat and more or less pain over the larynx, after prolonged efforts, necessarily powerful, at phonation. At this same time, one year after the commencement of his trouble, a small, rounded, hard tumor made its appearance over the upper part of the sternum, and two months later softened and discharged, leaving a ragged wound after the extrusion of considerable sloughy material, which occupied some two months in healing. No similar tumors have appeared elsewhere on his body; the inguinal glands have been enlarged, but no local sore preceded this enlargement, and a careful cross-examination throws no further light upon what may be an incomplete syphilitic history. As regards his present general condition it is good, and he has a clear hereditary history. Shortly after the wounds described above had healed over, a small growth was noticed to be forming over the left side and about the middle of the thyroid cartilage; it was painless, freely movable, and gradually increased in size. A second soon made its appearance immediately below the former, and as it increased approached and became attached to the first, so that the two together formed a large, irregular, nodular tumor, freely movable upon the wall of the thyroid cartilage. The tissues covering this mass have lately become adherent to it; it has approached the surface, and the overlying skin is reddened, somewhat œdematous and painful. Such then was the history given by our patient. Turning to the direct examination, the following results were obtained: External inspection shows that the left wing of the thyroid cartilage is overlaid by a hard, nodular tumor the size of a hen's egg, firmly attached to it, above and behind, together with the thyro-hyoid membrane; how much deeper the attachments run, manipulation cannot decide. This tumor, broad and adherent above and tapering to a point which is freely movable below, has displaced the thyroid cartilage markedly, so much so that its notch stands at least one inch to the right of the median line. The external appearances and the condition of the overlying tissues are as described above. With this one exception, there is no enlargement, either superficial or deep, of the lymphatics of the neck. The patient's respiration is labored and stridulous, both inspiration and expiration being equally affected; any exertion, and especially pressure over the tumor, which still further displaces the larynx, causes marked increase of the dyspnœa; deglutition is unaffected. His voice is lost; a rough whisper, only understood with difficulty, and itself lost after any prolonged attempts at phonation, being his only means of communication.

The examination of the larynx, the point, of course, of greater interest, could only be made after a prolonged training, rendered necessary by the unusual irritability of the patient's throat, together with an unfavorable anatomical configuration of the parts. A practicable degree of toleration being finally established, it was found that the normal lumen of the larynx was decreased more than one-half by the presence of an ovoid hard tumor, covered by a tense, red, and shining mucous membrane, which sprung from its left wall, immediately below the location of the false cord, and occupied entirely the ventricular orifice. The corresponding vocal cord, lying below the tumor, was unrecognizable, with the exception of a small portion at the lower and inner boundary of the tumor, which was seen only in phonation. The latter reaches,

* Moxon: *Trans. London Pathological Society*, vol. xix., 1868, p. 65. For a review, see Durham, Holmes's "Surgery," vol. iv., p. 586. Mackenzie: "On Growth in the Larynx;" p. 84, drawing, plate v.

† Mackenzie: op. cit. p. 85.

as is seen in the drawing, from the anterior commissure of the larynx, to within a short distance of the posterior, and terminates in a wounded extremity, just over the location of the *processus vocalis;* its anterior extremity tapers more or less to a point; and its outer surface, rounded where it disappears beneath the false cord, presents a nearly flat surface on its inner side, looking towards the opposite wall of the larynx. During phonation this tumor remains quiescent, no movement being perceptible, and the respiratory process causes no change either in its form or position.



On the opposite side of the larynx, a most interesting condition of affairs existed, which may be shortly described as follows:—During quiet respiration, a thin pale fold of mucous membrane, broad and flat at its outer aspect, and more or less pointed at its inner, can be seen lying upon the superior surface of the vocal cord and projecting beyond its free edge, until it touches the tumor upon the opposite side of the larynx. Its insertion is immediately below the false cord and on a line with the ventricular orifice, the opening of which it fully occupies. The larynx being in a quiescent state—the true import of this condition—pathological though it evidently was, was not at once apparent, but the act of phonation effected immediate changes which plainly declared its character and rendered a diagnosis as to its nature, to be alluded to later on, easy.

As the right vocal cord, then, advances during the act towards the median line, finally passing it and adapting itself more or less closely in a crescentic form to the slightly convex surface of the growth upon the opposite side, the small fold of mucous membrane alluded to begins to *roll backwards* upon itself, the process beginning on its under side, until phonation being complete, and the vocal cord tense, the fold has *entirely disappeared* within the ventricle; and the orifice of the latter, heretofore not visible, appears to view, wider and larger than in a normal condition; the fold remains hidden while the cord remains tense, but as soon as the latter is relaxed and falls back into its position at the side of the larynx, it immediately reappears at the mouth of the ventricle and quickly rolls outwards into its former position. This interesting process may be repeated indefinitely, the same change always taking place in the relation of the parts during phonation, and was observed and studied many times, not only by myself, but by others to whom I had the pleasure of showing the case.

In addition to the above conditions, the general laryngeal mucous membrane presented the characteristic appearances of chronic catarrhal inflammation, that covering the arytenoid prominences being especially thickened and deeply congested. The left aryepiglottic fold and part of the membrane decking the corresponding arytenoid cartilage, were at the time of the first examination slightly œdematous.

A diagnosis as to the exact nature of the appearances I have described, was a matter not unattended by some hesitation on my part, my remarks having reference to the large, immovable tumor upon the left side of the larynx; that upon the right, after careful observation, presenting unmistakable evidences as to its character. Cystic growths,* springing from the ventricle, papillomata,† fibroids,‡ fibro-cellular, or mucous polypi,§ cancerous growths,‖ and hydatids,¶ have all been reported as occurring in this same location. The gross appearances of the tumor in my case was alone sufficient to eliminate the two first forms of neoplasm in the differential diagnosis. Its size, the absence of a pedicle, its form and color, served to distinguish it from a fibroid growth. Türck ** reports a case of mucous polypus of the left ventricle, which presents many points of similarity with the case under consideration; and I am by no means sure, judging from his description of it, that his case should not rather be considered as one of partial prolapse of the ventricle. Finally, it is a well-recognized fact that the primary cancerous nodule may occur in the larynx and in this location, and that in its early forms it presents no characteristic or diagnostic type, so that its early recognition by means of the laryngoscope is therefore much more difficult than in the benign new formations in the larynx. In this latter form of disease, glandular infiltration in the immediate neighborhood of the larynx, in the early as well as the late stages, is the rule, and this complication was marked in the case which I have described. I confess, therefore, that appearances led me to believe that the hard, immovable tumor upon the left side of the larynx was perhaps cancerous in its nature, although the possibility of its being a prolapsed ventricle was certainly entertained; and that the external nodulated mass, lying over the thyroid cartilage, was due to the involvement of some of the deep chain of cervical lymphatics, and that my diagnosis was not clearly settled until the removal of the tumor, and its microscopical examination proved it to be a *prolapsed ventricle*, infiltrated with cells and indurated by the deposition of abundant plastic material, the result of its strangulation and inflammation, subsequent to its extrusion into the laryngeal cavity.

Proceeding, therefore, with the idea that the tumor with which I had to deal was probably malignant in its nature, I selected the *extra-laryngeal* method of operating for its removal, for this and other reasons, prominent among which, were the fact that a prolonged training had not succeeded in reducing the great irritability of the patient's throat, and that the introduction of instruments into the larynx caused immediate and forcible spasm, rendering, therefore, a delicate and thorough operation impossible. Entire extirpation of the tumor, of course desirable were its nature malignant, would be impracticable through the mouth, owing to its peculiar location, while its size and density would render the operation, even if feasible, tedious, and the possibility of its removal *en masse* slight. The complication of the case by the presence of the prolapsed ventricle upon the opposite side of the larynx, offered an additional indication for the performance of an *extra-laryngeal* operation. It could not be removed by the natural passages, even in a well-trained case, without tearing away more or

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* Gibb: Diseases of the Throat, p. 154. London, 1864. Bruns.: Die Laryngoskopie, Tübingen, 1865, p. 283.

† Tobold: Laryngoskopie und Kehlkopf Krankheiten, Berlin, 1874. Cases 5, 10, 14, 52, 202, pp. 478–503. Bruns.: op cit, p. 570. Lewin and Ulrich: Deutsche Klinik, 1865, No. 52.

‡ Tobold: op cit: cases 8, 23, 187, pp. 478–503. Prinz: Archiv für Heilkunde, p. 223, 1865.

§ Lewin: Deutsche Klinik, 1862, p. 258. Türck: Krankheiten des Kehlkopfes, Vienna, 1866, p. 202.

‖ Von Balassa: Wiener med. Wochenschrift, Nov. 1868. Atlee: *Boston Medical and Surgical Journal*, Feb., 1869.

¶ Ryland: Diseases of the Larynx, p. 226.

** Tobold: op cit, p. 434. Isambert: Cancer laryngé; Annales des maladies de l'oreille et du larynx, March 1, 1876, p. 14.

less of the adjacent mucous membrane with it, and consequently exposing the patient to considerable danger, not only from the acute inflammatory reaction, with its sequelæ, which would follow, but also to that which would probably be caused by the subsequent cicatricial contraction.

Thyrotomy, on the other hand, presented a sure means which would permit of its removal by a clean incision, and would therefore obviate all of the above dangers. Finally, the indications for operative interference, determined by the state of the patient, were immediate. The operation was accordingly undertaken on April 7, 1875, with the assistance of my colleague Dr. R. F. Weir, as follows:—To permit of the removal of the external tumor, which lay over the left wing of the thyroid cartilage, a T shaped incision was made over the median line of the neck, and the tumor laid bare. It was found to be firm, dense, and nodular, with firm adhesions on its inner and upper borders, and over its base, extending not only to the upper left edge of the thyroid cartilage, but to the upper one-third of the left wing and well over the angle to the right. Above, they were attached to the thyro-hyoid membrane and the hyoid bone. The outer edge was free, and lay under the inner border of the sterno-mastoid muscles. The enucleation of the mass was proceeded with from within outwards, and accomplished as rapidly as the nature of the adhesions and the requisite careful dissection would allow. No connection was discovered between the intra- and extra-laryngeal growths, as was at one time thought possible might exist, and subsequent examination showed the removed mass to be made up of connective tissue, striped muscular fibres, small round or fusiform cells, packed irregularly together towards the edge of the sections, granular in their structure, and in some instances nucleated, adipose tissue and vessels. There was no traces of an epithelial structure, the mass being plainly inflammatory in its character. Whether or no it originated in a lymphatic gland was impossible to say (Dr. Mann). The original incision in the median line was now carried still further downwards towards the sternal notch, and the muscles and tissues overlying the trachea being pushed aside, and the isthmus of the thyroid body, downwards, a sufficient portion of the trachea was laid bare to permit of the introduction of a tracheotomy tube into an incision made from the fourth ring upwards to the cricoid cartilage. All spasmodic movements of the larynx and cough having subsided after the further administration of ether through the tracheal tube, and the parts being entirely at rest, the angle of thyroid cartilage was cleared by careful dissection of its overlying tissues, so that its edge might be plainly seen, and admit, after completion of the section and removal of the intra-laryngeal growths, of accurate coaptation, a result which I further endeavored to carry out by introducing threads through the wings of the thyroid, just above its notch, to serve later on as guides, when bringing them together. The thyroid cartilage was now divided in the median line, by a succession of short nicks or cuts, made with a small, strong, sharp-pointed knife, from above, below, until the crico-thyroid membrane was reached, carefully avoiding any penetration of the laryngeal mucous membrane with the knife, and thereby causing cough and spasmodic movements of the parts. The cartilage was readily divided above, but below was ossified at points, and gave some resistance. The section being complete, the edges of the incision were held slightly apart by means of small retractors, and the division of the mucous membrane undertaken. This part of the operation presented not a little difficulty, owing to the fact that the membrane was pushed before the knife, and not readily cut through, while spasm and cough further embarrassed a procedure which should have been very accurate, and was only made so by great care and frequent delays. I mention this fact particularly, because this method of division of the cartilage and membrane, introduced by Krishaber,* is theoretically good, and presents at first sight several advantages. My experience has, however, taught me the contrary, and I should hesitate to employ it in any subsequent operation. Separating the wings of the thyroid widely, by means of small hook retractors, still further space was found necessary, and was obtained by dividing the thyro-hyoid membrane upwards, and the crico-thyroid downwards, care being taken throughout the operation to preserve the cricoid cartilage intact.† A full view of the interior of the laryngeal cavity was now obtained, and it was seen to be about one-half filled by a broad, dense growth, situated upon the left wall immediately above the true cord. Its base, which was broad and thick, disappeared within the ventricle, the opening of which it fully occupied. The mass was hard to the touch, and could only be drawn slightly outwards from its seat. On the opposite side of the larynx, there protruded from the ventricle a rounded, pale fold of membrane which lay upon the corresponding cord. Pressure upon it returned it fully within the ventricle. Upon its anterior extremity, which was more rounded than its posterior, was a small linear elevation, terminating in a small protrusion, which undoubtedly represented the location of the *sacculus laryngis* described by Cruveilhier.

Spasmodic movements of the larynx being constant, and frequent efforts at deglutition causing a regurgitation of blood into the laryngeal cavity, obscuring the clear view necessary to a careful extirpation of the tumors, the parts were allowed to remain for a few moments at rest, the inhalation of ether being meanwhile proceeded with. I will say at once that, throughout the whole operation, these intervals for the purpose of anæsthetization were necessarily frequent, and as soon as the patient became quiet, an attempt was made to keep the larynx clear of blood and mucus by passing a small sponge, secured by a thread, above into the superior parts of the larynx and a second below into the ring of the cricoid. This procedure succeeded well.

The tumor upon the left side was now seized with forceps, drawn slightly outwards and cut away parallel with the ventricular orifice by means of curved scissors, and the wound subsequently cauterized. The same procedure was then adopted with the prolapsed membrane of the ventricle upon the opposite side of the larynx, and the excised portions at once placed in the hands of Dr. M. D. Mann, the able lecturer on microscopy at the College of Physicians and Surgeons, for examination and report. This has since been made; and, for the sake of clearness, I introduce his views as they have been communicated to me, at this point. He says: "The excised portion, taken from the right side of the larynx, over the ventricular orifice, was found to consist of loose connective tissue, surrounded by mucous membrane. The tissue was slightly infiltrated with small round cells, they

* (1) *Faits Cliniques de Laryngotomie.* Paris, 1869. (2) Heath, op. cit., p. 92.

† Hueter: *Handbuch der Allgemeinen und Speciellen Chirurgie.* Billroth, Pitha. Erlangen, 1872, p. 90.

being most numerous in the neighborhood of the vessels, a few striped muscular fibres were seen attached to the base of the mass; the vessels were large and numerous, well dilated, and filled with red globules. There was no disposition to proliferation on the part of the epithelial cells of the mucous membrane. The opposite tumor, taken from the left side of the larynx (see cut), presented essentially the same appearances, except that the small round cells were much more numerous, the tissue being literally packed with them. The position and appearance of the tumors substantiate the diagnosis of *prolapse of the laryngeal ventricles*, the primary cause being an inflammatory swelling and thickening of the submucous connective tissue, which, pushing the mucous membrane before it, protruded it through the ventricular orifices."

The edges of the thyroid cartilage were now brought together with care, and secured by four thread sutures, and the external wounds closed, the trachea tube being left in position. The hemorrhage during the various steps of the operation which I have detailed was not excessive, several small vessels were ligated and others twisted, being thus readily controlled. The general oozing of blood was more difficult to deal with, but sponging, and the application of ice occasionally, controlled it sufficiently to prevent its being a very serious annoyance.

The subsequent progress of the case may be summed up in a very few words; it, with the exception of a slight pneumonia, which developed itself on the third day after the operation, being in all respects satisfactory. On the fourteenth day a laryngoscopic examination was made, and the lumen of the larynx being found free, and respiration easy and uninterrupted, with the tracheal tube closed, it was corked, and removed two days later, when the wound was brought together with adhesive straps. On May 4th, 27 days from the date of the operation, the patient was discharged cured.

The main points of interest in the case remain now to be considered, viz., the results of the operation, and insomuch as the general question is still an open one, whether the operation of thyrotomy should "be earlier, more boldly and more readily resorted to" in the class of cases such as the one under consideration, or whether "it should be reserved for extreme cases," I regard each case added to the general fund of experience as having its value; and desire, therefore, to record the results carefully in the present one. As regards the special question of whether it was indicated in my particular case, to the exclusion of the intra-laryngeal methods, I leave the reader to decide; my belief, shared by others,* being that it was; and I have given my reasons therefor. Mackenzie† considers the results of the operation under four heads; and his classification being plain and to the point, I shall endeavor to follow it out in my summing up.

The rapid convalescence of my patient, his continued and present well-being, and the great relief afforded him by the operation, which certainly insures his future instead of detracting from his chances of life, answer conclusively the first proposition which is offered, the relation of the operation to the preservation of life. As regards the second, its relation to respiration, my answer is, that the operation afforded the patient a most marked relief, indeed effected a cure, for the stridor, laryngeal spasm, and dyspnœa have entirely disappeared; and his respiration is now uninterrupted, easy, and complete. The effect of the operation upon the voice, the third proposition, as regards its results, may also, I think, be answered favorably. I am well aware, as Mackenzie* states, "that the most elaborate efforts have been made by operators to give favorable descriptions of the voice after the operation," and I am therefore somewhat embarrassed in the choice of a term which will accurately describe its condition in my patient; but, having had an opportunity of examining several patients besides my own, upon whom the operation had been performed, and of hearing the result as regards the voice, I am perhaps in a position to intelligently judge of the result in my own case; and while I feel that my opinion also may be open to the suspicion of not being entirely impartial, I risk it, and desire to be clearly understood as stating the condition fairly, when I describe the voice as having undergone the most marked improvement, having become *full* and *loud*, and lacking only a certain slight, but perceptible element of clearness or tone, to be in all respects *perfect;* in short, was, I am convinced, as perfect a voice as is ever attained after the division of the vocal cords at their anterior commissure; for, granting that the approximation and adaptation of the halves of the thyroid cartilage after its division, was perfect and true, that the vocal cords lay therefore on the same plane and were intact in their continuity, still at the commissure, the point of their division, more or less plastic exudation must take place during the reparative process, and will interfere either by interposing as a mechanical obstacle to the perfect closure of the glottis at this point, or else by so thickening the cords and their free edges, that perfect vibration cannot, *at least for a time*, be secured. This condition, then, which was plainly to be seen by means of the laryngoscopic mirror in my case, and which was absolutely *the only trace* of the previous operation, perceptible in the larynx, was I believe the cause of this lack of perfect clearness of voice, which I have endeavored to describe; and this is proved by the fact, that during the time that the patient remained under my observation (some months) the voice *steadily improved*. It may be asked, did not the removal of the ventricles of the larynx influence the voice-sounds, and was not this perhaps the cause of the want of tone? This question I am not entirely prepared to deny, and indeed it is a most interesting one; and an opportunity for its elucidation here presented to us for the first time, as far as I am aware, from clinical facts derived from observations on the living subject. If the function of the ventricle is, as claimed by some,† to give resonance to the voice, which I doubt; then, perhaps, the removal of both, in my case, was the cause, partial or complete, of the want of absolute clearness in the patient's voice, although the physical and direct cause which I have given was fully competent to account for it without employing this hypothesis. Two other effects, which would theoretically be produced upon the vocal cords by the removal of the laryngeal ventricles, present themselves to my mind: 1. A limitation of their adductive mobility;‡ and 2, a deprivation of more or less of their lubricating mucus,§ which would render them dry and hard, and destroy in part their fine vibrating qualities. That both of these suppositions are in accordance with

* Hueter: op cit, p. 87.

† Mackenzie, On the Results of Thyrotomy for the Removal of Growths from the Larynx; London, 1873.

* Op cit, p. 14.

† Merkel: Anatomie und physiologie des menschulichen stimmund sprach organs, Leipzig, 1863, p. 644.

‡ Stor: Ueber Laryngoscopie. Volkmann, Klinischer Vorträger No. 36, 1872. Holden. Anatomy, London, 1861, p. 141.

§ Gray: Anatomy, p. 708.

theories which have been advanced as to the function of the ventricles, we well know. Whether they had their effect in modifying my patient's voice, is, as I have said, an interesting question; but, as far as my observation goes, and I studied the case carefully, realizing the unusual opportunity which was afforded me, I could not see that the action of the vocal cords was in any way influenced by their removal; adduction and abduction were well performed and their mobility in no way apparently restricted, nor were the cords dryer than they should be. Whether the first theory advanced had its influence, I am unprepared to assert; and prefer to submit the whole matter, as I have stated it, for discussion, modestly hoping that perhaps the case may throw some light upon a disputed question, and call forth an expression of opinion from those who are much better able to discuss the subject than I am, especially within the limits of a restricted paper.

The fourth and last question as to the prospects of thyrotomy, in its relations to immunity from recurrence of the removed tumors, is answered in my case, by the nature of the laryngeal tumors, for the removal of which the operation was undertaken.

Finally, I venture to think that the deductions which may be drawn from the foregoing facts as given, permit me to fairly class my case of thyrotomy among the successful ones.

Reports of Hospitals.

BELLEVUE HOSPITAL.

Notes of Practice and Peculiarities of Treatment.

INFLAMMATION OF THE STERNO-CLEIDO-MASTOID MUSCLE.

The patient was a child two months old. At the time of her delivery, the doctor, it was said, was obliged to make pretty strong traction upon the left side of the neck. Three days subsequent to delivery, the mother noticed a small lump, which was evidently situated in the sterno-cleido-mastoid muscle, below and just back of the lobe of the ear. This lump had remained of about the same size up to the day of examination. There had been no heat or evidence of inflammatory action, as the mother thought, but by the use of the thermoscope it was determined that there was some elevation of temperature present in the lump. The swelling was not in the glands beneath the muscle, for it was evidently situated above them; nor was it connected with the parotid gland in any way. The diagnosis was rupture of some of the fibres of the sterno-cleido mastoid muscle, followed by some inflammatory action, plus some hemorrhage. Prognosis good. Treatment inactive. This condition is rather rare, and one concerning which little or nothing is said in books. So said the visiting physician.

ACUTE ARTICULAR RHEUMATISM—ICE TREATMENT.

Two cases were seen, which illustrated not only the benefit derived from this plan of treatment, but represented two classes of patients; namely, those in which the joint symptoms are accompanied by only slight constitutional disturbance; and those in which the constitutional disturbance becomes the leading feature.

The ice treatment was regarded as the one which afforded special benefit in those cases in which the joint symptoms are prominent, and the success of the treatment depends very much upon the thoroughness with which it is carried out. The object is to relieve pain; and this is done very effectually by the application of ice, if it is properly used. It should be powdered (snow answers equally as well), and placed in ice-bags made of rubber or oil silk, and these should surround the joints affected. If the ice is not powdered, the joint is apt to be only partially covered, hence the application is not thorough. Properly applied, it seems to be almost a specific against the pain of this affection. The ice-bags should remain around the joint for 36 or 48 hours, and then they may be removed, but should be reapplied as soon as the pain returns.

The patient should be kept in the house just as long as when under any other treatment; and the usual duration of the disease was from 14 to 21 days. While ice was used, no other treatment was given; and by its use the patients before us were very effectually relieved of pain, which is decidedly worth accomplishing in a rheumatic patient.

Another case was seen, in which was illustrated the opposite condition already mentioned; namely, one in which the constitutional symptoms were the prominent feature. There was high temperature, some delirium, and evidently some constitutional disturbance. In this case, the patient was placed in a bath, having a temperature of 80° or 90° F., kept in for ten minutes, and the bath was repeated in two hours with great benefit.

There was another case, the like of which every practitioner has seen, one in which the disease had lasted for a long time; the patient had become anæmic, and, although the joints were involved, they were not acutely so. The patient was being helped out of his difficulty, as many of this class of cases can be—not all, however—by the use of the following pill, taken three times a day.

℞. Strychninegr. $\frac{1}{30}$.
Quinine, sulph.gis. iij.
M.
Ft. pil.

FRACTURE OF EXTERNAL CONDYLE OF HUMERUS—EARLY PASSIVE MOTION.

Particular attention was drawn to the importance of early passive motion in cases of fracture involving joints or situated in close proximity to them. The case was one in which fracture of the external condyle of the humerus had occurred, and was of sixteen days' standing when passive motion was first employed. At first it consisted simply in flexing, extending, pronating, and supinating the forearm joint a trifle, and each of these movements was made only a single time. Early passive movements, very slight at first, but continued, was the principle taught.

To illustrate the importance of this principle and its faithful and long-continued application, it may be stated that this patient returned to the hospital about one month afterwards, with his forearm flexed at nearly a right angle with the arm, and the elbow joint nearly anchylosed. His occupation had not rendered complete flexion and extension necessary, passive motion had been neglected, and the result has been stated.

HEMIPLEGIA—INVOLUNTARY DISCHARGES FROM THE BOWELS—SALICYLIC ACID AS A DEODORIZER.

The case was one of right hemiplegia occurring on a woman æt. 45 years. She had a moderately good

family history, and her personal history was good, with the exception of occasional intemperance. She was suddenly attacked while riding in a street car, had no loss of consciousness, but simply found herself unable to get out of the car when she arrived at her point of destination. When admitted to the hospital there was slight aphasia. There were involuntary movements from the bowels; and for the relief of these, belladonna and electricity were employed. The belladonna is very serviceable for the relief of both involuntary discharges from the bowels and incontinence of urine. The chief item, however, for which this note was made was the use of salicylic acid to deodorize the fæces. In a few cases the use of the acid for this purpose has been attended with very satisfactory results, and the odor has passed away entirely with the gaseous escapes from the bowel, thus avoiding the excessive offence that attends a discharge of fæces in their natural condition.

POINT IN PHYSICAL DIAGNOSIS.

The point related to the location of the gall-bladder. In most books it is said to be situated just above the free border of the ribs, directly under a line drawn from the nipple to the umbilicus, or a line drawn nearly vertical from the nipple to the free border of the ribs.

The point made was that neither of these directions for determining the location of the gall-bladder was correct, but that it was situated just above the free border of the ribs, directly under a line drawn from the symphysis pubis to the inner border of the rounded outline of the head of the humerus.

HÆMATURIA, INTERMITTENT IN CHARACTER.

This case had been quite puzzling to all who had attempted a diagnosis, and the leading features were as follows:

A male patient, æt. about 55, had, since admission to the hospital in June, 1875, presented symptoms referable respectively to the heart, the lungs, the bladder, and the kidneys. His heart was slightly enlarged; that is, there was probably hypertrophy and dilatation of the left ventricle, and at the same time a loud systolic murmur was heard with its maximum intensity at the apex and conveyed to the left, indicating mitral regurgitation. The action of the heart, however, had always been regular, and, except for the physical examination, the cardiac disease would probably have escaped notice. With regard to the lungs, he had had occasional attacks of hæmoptysis, and during these attacks had coughed up considerable quantities of blood. There had been found dulness upon percussion, accompanied by coarse and fine râles over different portions of the chest, and sometimes bronchial breathing had been present over those affected portions. These physical signs had been intermittent. At no time, however, had they disappeared *entirely*. During those periods when the physical signs had been the most prominent, there had been a certain amount of febrile movement. The temperature had become elevated for several days, and that had been coincident with the more marked development of the physical signs mentioned. From this train of symptoms, it was believed that he suffered from occasional attacks of pneumonia; not the ordinary croupous pneumonia, but from that form of pneumonia which consists of a mere filling up of the air vesicles with hypertrophied pulmonary epithelium; in other words, the form which very frequently accompanies chronic heart disease. Each of these attacks, it seemed, had been attended with a certain amount of bronchitis; and it was believed that it was the bronchitis that gave rise to the elevation of temperature and the râles. It was the lung consolidation which gave rise to the dulness upon percussion. In addition to these symptoms, the patient had from time to time passed bloody urine. During his stay in the hospital he had at short intervals passed bloody urine a number of days in succession; sometimes in clots, sometimes mixed with the urine, and sometimes in considerable quantities. Between the attacks of passing blood by the urethra, the urine had been *entirely clear* until very recently; then, more than four months subsequent to his admission, considerable quantities of mucus had been discharged with it. When he had not been passing blood, there had not been any evidence whatever of bladder trouble. The prostate gland was not enlarged; no tumor had been detected in the bladder, nor calculus, nor was there any physical evidence of disease of the kidneys, and no tumor could be felt along the course of the ureter, nor in the regions of the kidney. How was the intermittent hæmaturia to be explained? It was regarded as part and parcel of the same pathological lesion which gave rise to the hæmoptysis; and that both depended upon the chronic valvular disease of the heart.

LEUCOCYTHÆMIA—SPLENIC VARIETY.

It was a well-marked case, for the spleen measured 16 in. in vertical and 12 in. in transverse diameter; there was no enlargement of abdominal or thoracic glands that could be detected; there was only a very slight enlargement of the glands in the groin, and the proportion of the white to the red blood-globules was about one to three or four.

Repeated examinations of the urine had been made, but no excess of *uric acid* had been detected. The patient at one time improved considerably while drinking beef blood.

PRODROMATA OF HEMIPLEGIA.

The following case gave rise to certain suggestions, which were noted as follows: A female patient, æt. 50, who was perfectly well three weeks ago, first noticed that a brush fell out of her hand. She picked it up, and it fell from her hand a second time, and then she found that she was speechless. She took to her bed as soon as she became speechless, and in a short time the headache which had *preceded* the attack, passed off, and did not return. Vertigo preceded the headache. A mitral regurgitant murmur was present. Now what had caused the hemiplegia in this case? It was observed that cerebral embolism was almost always preceded by the lodgment of emboli in other organs: (1), the spleen, most commonly; (2), the kidney; and (3) the liver. The question to ask then was, Have you at any time been suddenly attacked with severe pain in either side, or in the back accompanied by trouble with the water? In this case the answer was in the negative; and that led to the consideration of the *prodromata* of *apoplectic hemiplegia*, or cerebral hemorrhage. The first predisposing cause was said to be endarteritis, which resulted in diminishing the calibre of the arteries; hence both functional and textural derangements occurred in the parts supplied by the arteries affected. In other words, there was degeneration of nerve tissue preceding the development of apoplexy. The results mentioned were:

First. There was loss of memory; especially memory of words.

Second. Sudden confusion of ideas; the person might be talking, for instance, and all at once be obliged to stop and think what he was about to say.

Third. Vertigo. If an elderly person suffered from vertigo, and it was associated with a foul tongue, it might depend upon stomach trouble; but vertigo with a clean tongue was regarded as a premonitory symptom of an apoplectic seizure.

Fourth. Wakefulness early in the morning. For instance, a person who had commonly slept well, began to awaken early; and especially apprehensive was that symptom, if it was accompanied by headache, which wore off after the person arose and began to exercise.

Fifth. Cramps in the calves of the legs. The visiting physician remarked that he had never seen a case of embolism that was preceded by that symptom.

Sixth. Numbness upon one side of the body. Now, to prevent the occurrence of apoplexy: First, remove the constipation commonly present. For that purpose, a favorite pill was the following:

℞ Ext. colocynth co..... ʒ i.
Ext. nucis vom..... grs. x.
Ext. belladonna..... grs. v.
Div. pil. No. xx.
S. One at night.

The compound licorice powder, consisting of senna, cream tartar, and pulverized licorice, was also recommended, in teaspoonful doses. For the endarteritis itself, bichloride of mercury was recommended in one-twentieth grain doses, until all the prodromata had passed away; and with that remedy, nitrate of silver in ¼ grain doses might be combined with advantage. In many of these cases, cod-liver oil might be indicated. Such was the plan marked out.

EXCISION OF THE SHOULDER-JOINT—RECOVERY, WITH ALMOST PERFECT MOTION.

The history of the case was rather interesting, and is outlined as follows: The man came into the hospital to obtain relief from what was supposed to be an abscess about the shoulder-joint. He had had his shoulder injured some time before his admission by the heel of a boot placed in the axilla, while efforts were made to reduce a supposed luxation. The tumor was opened and pus escaped, but with it came a rush of blood that required a vigorous use of cotton and persulphate of iron for its arrest. An aneurism had been opened. The shoulder-joint was subsequently excised, and about one inch of the shaft of the humerus removed. At the operation, it was found that the aneurism was connected with the posterior circumflex artery, and it was thought it probably commenced at the time the pressure was made on the axilla. Subsequently, inflammation about the sac had occurred, and when the opening was made to allow the escape of pus, the aneurismal sac was punctured. The motion of the arm was almost perfect, and the man stated that he could work as well with his right as with his left arm.

COLLES' FRACTURE.

The case presented one point of interest, at least, which was worthy of consideration. It was treated by position. The fore-arm was laid upon a piece of board, and swung in a sling, and then allowed to take its own natural course without interference on the part of the surgeon. The result was as good as that obtained by any special plan of treatment.

WALKING PNEUMONIA.

This case presented a few points of interest, and warranted a brief sketch of its history. A male patient, æt. 50 years, had been sick two weeks. He was seized with a chill which was followed by a fever and sweats, free expectoration of blood of a bright red color, and bright red blood was also discharged from the bowels.

Physical examination revealed a vesiculo-tympanitic percussion note at the upper portion of the chest, upon the left side in front, and dulness upon percussion below the spine of the scapula, upon the left side, together with bronchial breathing, broncophony, increased vocal fromitus, and sub-crepitant râles. At the time of the examination, the disease had probably been present ten or eleven days. The man was intemperate, and it was remarked that copious bronchial hemorrhage recurs not infrequently at the outset of a pneumonia, taking place in persons of such habit. The discharge of blood from the bowels having a bright red color at the same time, showed that there was present a general tendency to hemorrhage from the mucous membranes. The man felt well; had a pulse of 105, and a respiration only a trifle hurried. Pneumonia, it has been said, occurs more frequently at the apex than at the base of the lung in persons addicted to the use of alcohol. This case, therefore, was an exception to the stated rule.

SUBACUTE PLEURISY—VOCAL FROMITUS—ASPIRATION.

The history of the case is not necessary further than to state that ℥ xxxii of fluid were drawn out of the left pleural cavity, which placed the diagnosis beyond doubt. Before the fluid was withdrawn, however, vocal fromitus was *distinctly obtained over the fluid*, and indeed was more marked than it was after the fluid was withdrawn. This also was an exception to what has been regarded as a rule. Another feature in the case was the equal size, by exact measurement, of the right and left sides of the chest, although there was some bulging of the intercostal spaces upon the left side. There was probably some enlargement of the left side, because the man was right-handed; and the left chest, quite likely, was naturally somewhat smaller than the right. The aspirator was used, although there were no urgent symptoms present. It was believed that the patient would do much better with the fluid removed, than to permit it to remain, and trust to the absorbents for its removal.

Progress of Medical Science.

A STRANGE AFFECTION OF THE HAND.—M. Després recently exhibited to the *Académie de Médicine* a patient who presented the following appearances: His forearm and hand were of a bright red color and exhibited several ulcerations, some covered with granulations and some having a grayish floor. The index, ring, and little fingers were almost entirely destroyed. There was no swelling of the parts bordering on the ulceration; the parts of the fingers left were very red, wine-colored, thin, and the integuments were indurated; close to the ulcerated parts the bones were laid bare in spots by the sloughing of the soft parts. The patient complained of acute lancinating pains in the forearm, hand, and fingers, increased by exposure of the parts to the air. The disease had commenced seven or eight years before, with ulcerations of the forearm, which developed successively and left a

number of white irregular cicatrices that are still visible. The patient had some scrofulous manifestations in his infancy, but his health had been good up to the outset of this disease.

M. Després denominated the affection lupus of the hand. M. Duvergie considered it an instance of a form of leprosy that is endemic in France. M. Hillairet denied the existence of a leprosy originating in France, and held this to be an instance of an affection described under the name of symmetrical gangrene of the extremities. M. Hardy agreed with M. Hillairet, and drew attention to the relations existing between leprosy, symmetrical gangrene, and scleroderma, all of which appear to depend on a lesion of the nerves presiding over nutrition. The discussion ended without having cleared up the question.—*Journal de Méd. et de Chir.*, April, 1876.

Carnivorous Plants.—*The Révue des Deux Mondes* for February contains an excellent article on this subject by M. Planchon. The true carnivorous plants seize and retain a living prey, digest and dissolve it by means of an acid glandular secretion, and finally absorb, and are nourished by the products of this digestion. The most important of these plants is the drosera, the upper surface of the leaf of which is covered with hairs or tentacles, moistened with a viscid, acid, glandular secretion. When an insect lights on one of these leaves it is seized and imprisoned by the tentacles, the leaf then curves on itself and encloses it, and the process of digestion begins; this terminated and absorption completed, the leaf flattens out again, and is ready for new victims. If small pieces of meat or of hard-boiled white of egg be placed on a leaf, they are seized in the same way, and may be seen gradually softening and becoming diffluent and transparent under the action of the acid secretion of the plant, which will also attack cartilage and even the enamel of the teeth. The absorption of the products of this digestion is shown by the dryness of the glands of the tentacles towards the end of digestion, and by the changes of color in the protoplasm of the cells.

The drosera muscipula, and the pinquicula present analogous phenomena, with some minor differences, as do also the nepenthes distillatoria, and several varieties of the sarracenia, and it is probable that further research will add many other varieties of plants to the list of carnivora.—*Lyon Médical*, April 9.

Confervæ in Solution for Hypodermic Injections.—M. Limousin, who has been experimenting with the substances that are said to prevent the formation of the confervæ, recently presented to the *Société de Thérapeutique* a solution containing four grains of hydrochlorate of morphia, and one twenty-fifth of a grain of salicylic acid, which he had kept for two months, and which did not show a trace of confervæ. In the course of his investigations he had obtained a salicylate of morphia, but as it was only soluble in the proportion of 1 to 150, it was useless for hypodermic use. A salicylate of quinine was still more insoluble. M. Beaumetz obtains excellent results by employing the distilled water of cherry-laurel.—*Le Mouvement Médical*, April 8.

Pathology and Treatment of Angina Pectoris.—Angina pectoris is generally considered to be a neurosis of the cardiac plexus. This, however, Professor Sée denies, because the sympathetic is not a sensory nerve. He considers it an affection of the pneumogastric alone, the only sensory nerve that enters into the formation of the cardiac plexus, and maintains that it is due primarily to anæmia of the heart. The mechanism of its production he explains as follows: When, in consequence of some organic lesion, the myocardium receives less blood than normal, the terminal branches of the pneumogastric contained in it receive less also, and it is a well-known fact that pain and numbness are the immediate consequences of anæmia of a nerve—hence the anxiety and the substernal pain. This pain produces a reflex irritation of the motor branches of the spinal-accessory nerve, which is the real moderator of the heart's action, hence the heart's action is at first less frequent, becoming accelerated and irregular only when the excitation of the moderator nerve gives place to exhaustion and paralysis. This excitation may even be sufficient to cause a stoppage of the heart's action. The radiation of the pain into the left arm, etc., is explained by the transmission of the initial excitation of the intracardiac filaments of the pneumogastric to other neighboring nerves. The excitation is transmitted to the nerve centres, and thence reflected at once by eccentric or secondary irradiation to other sensory nerves. With these radiated pains, veritable reflex motor disturbances may be associated; for instance, trismus or constriction of the œsophagus.

Professor Sée also claims that this explanation applies equally well to the so-called cases of primary angina pectoris, which is generally supposed to be a simple neurosis, totally independent of any cardiac lesion, though it may end fatally. These cases are principally met with in topers, smokers, the gouty, the hysterical, and in hypochondriacs. One of the first symptoms of alcoholism is endarteritis, and no one claims that the coronary arteries are exempt from this lesion. Smokers are said to be very subject to angina pectoris, but this is the case only with those who use tobacco excessively, and in whom it has already lessened the appetite and weakened the digestive powers. An intermittent and irregular pulse is the first symptom of this excessive use of tobacco, and this is followed by a tetaniform contraction of the vessels. Is it irrational to suppose a similar contraction of the coronary arteries, and consequent ischæmia of the heart? Cardiac lesions, especially of the myocardium and the coronary arteries, are the rule, not the exception in old gouty patients, hence angina pectoris cannot be primary in them. Finally, vaso-motor disturbances are well known to be of frequent occurrence in cases of hysteria and hypochondriasis, and spasm of the coronary arteries will produce ischæmia of the heart just as well as atheroma. Angina pectoris is therefore held to depend on a similar anæmia.

The indications for treatment are promptly to relieve the pain, to regulate the circulation, and to facilitate the respiration. Hypodermic injections of morphine are the most reliable means of treatment. Chloral hydrate is second only to morphine. It produces sleep more promptly, relieves pain better, and facilitates respiration, but it has hardly any effect on the circulation. It seems to be absorbed more rapidly when given by the rectum than by the mouth. Chloroform is too dangerous to be used. Nitrite of amyl, a drug little used as yet in France, produces dilatation of the vessels, but has no sedative effect, and hence fulfils the indications only in part. Hypodermic injections of atropine are dangerous, especially in children. The antispasmodics proper are useless. Electrization of the sympathetic is out of the question, and of the pneumogastric, though vaunted by some, is dangerous. In the intervals of the attacks, we must rely on digitalis, bromide of potassium, and good hygiene. —*La France Médicale*, April 5 and 8.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, June 3, 1876.

QUESTIONS FOR THE AMERICAN MEDICAL ASSOCIATION.

Several topics, of more or less interest, will doubtless engage the attention of the American Medical Association at its next meeting. We have already suggested, in our last number, what one of these should be, as influencing the legislation of the Medical Congress upon a matter which has a truly national importance. It is not necessary to do more than remind our readers of the arguments in favor of the proposed system of uniformity in clinical observation, to give us the excuse for urging its hearty recommendation by a suitable committee from this Association. There are, however, other matters to which we wish to draw attention in view of the possibility of their being brought up for discussion. One of these has prospective discordancy about it which we do not like, and which, for the harmony of the meeting, we would fain hope would not be brought up at all; we refer to the homœopathic trouble at the University of Michigan. There is such a determination by some who have taken an active part in the discussion to spring the question upon the Association, that nothing but the greatest care will prevent a disgraceful exhibition of unreasonable temper and hot-headed partisanship. The latter will be the inevitable result of a free family talk over the merits of homœopathy. There are two sides to the Michigan University affair which deserve to be carefully considered before action is taken—to be thoroughly canvassed before a definite and impartial decision is rendered. As it is impossible in open meeting to go over the merits of the case in the detail necessary for a general understanding of the point at issue, the wiser course would be to refer the whole affair to a committee who should have the requisite time for learning all the facts of the case. In no other way can this question be settled to the satisfaction of the thinking men of the profession. We have enough confidence in the good sense of the majority of the members of the Association to believe that the course suggested will be the one promptly adopted, if attending circumstances make it necessary.

We cannot expect to escape the usual report on medical education, in one guise or another. We should not if we would. During the past year more than usual attention has been directed to many needed reforms in preliminary education, college standard, and graduating requirements. The Association has a by-law which provides that preliminary education shall be a condition for entering a medical college, and yet it is practically a dead letter. This, however, is not due to any shirking of responsibility in regard to the expression of an opinion or any lack of desire to enforce the necessary conditions. The real responsibility for the non-fulfilment of an implied promise rests upon the colleges themselves, showing a reprehensible apathy towards measures which the profession at large consider of the utmost importance.

The elevation of the college standard is another subject in which the Association has been deeply interested, and while it has accomplished much in the way of substantial progress in this particular, very much more remains to be done to encourage the faithful workers in the interests of this reform. While, however, it is zealous for progress, it must be watchful of any retrograde movement, of any attempt to shorten the prescribed term of study, such as is reported to have been made in some few of the Colleges. There have been so many ugly rumors connected with the management of these institutions, so many questionable practices of increasing the number of students, of which they are said to be responsible, that it now becomes the duty of the Association to examine testimony and be prepared to exert its authority in the punishment of such as are really proved to be guilty. Rest assured, of the support of the profession it has nothing to fear in the performance of its legitimate duty.

The requirements for graduation, although last in the list, are by no means of the least importance. Far from this being the case, their proper definition and the adoption of the proper regulations for their enforcement is the substantial and practical starting for the reform of the other evils now so inseparable from our present College system. A strict and impartial examination for graduation makes the fulfilment of the conditions of preliminary education, time of study and method of teaching, absolute necessities. We have repeatedly referred to the method of conducting these examinations by independent boards, and our readers are sufficiently familiar with the advanced ideas upon the subject. This matter of state board examinations has been so thoroughly discussed that the Association should be prepared to act upon some one of the suggestions which have been thrown out by

the different writers upon the subject, and which have the most reasonable claims for practical application.

The project for the formation of a National Health Board is one which has been urged by sanitarians for a long time, and it is gratifying to see that the Association is determined to use its influence in the direction calculated to do the most good. The interest which has been awakened is, we trust, not likely to grow lukewarm, and we anxiously look for a report of substantial progress in the work at the next session.

The army-rank question is another which will doubtless receive its annual ventilation of resolutionary endorsement, but the present prospect of forcing the conviction of its importance upon our legislators is not so promising as we might wish. Still, not discouraged at failures, it is the duty of the Association to continue to work and to make every effort to gain its end.

In conclusion, we have to say that the present organization of the Association is such as to leave no doubt of its efficiency of work in all its different departments, and we see no reason, under the administration of its distinguished president, why its coming deliberations may not be wise and temperate, and its influence for good be commensurate with its importance as the representative national medical organization of North America.

THE ENGLISH DEBATE ON THE PATHOLOGY OF SYPHILIS.

III.

In our last issue we had followed the debate on Syphilis before the Pathological Society of London to the end of the address of Dr. De Meric. We come now to consider those of others, beginning with Dr. Broadbent. This gentleman's remarks were, on the whole, valuable and pertinent, but rather too lengthy. He differed from Mr. Hutchinson in certain points as to the course of infantile syphilis. He had seen gummatous infiltrations into the tongue and skin in subjects of this disease, an occurrence, if not denied, yet considered very improbable by Mr. Hutchinson. He alluded to the fact referred to in the opening, that two subjects of congenital syphilis had died in consequence of granular kidney, which condition, by Mr. H., was thought to be due to the use of iodide of potassium. He had seen a case in which such a complication was observed, and being in doubt as to its causation, suggested that data bearing upon it should be produced. He alluded to the fact that the evidences of hereditary syphilis disappeared quite completely in time, and that subjects of the disease enjoyed average good health. He evidently leans to the opinion that when amyloid disease is found in early life it is due to this disease. Taking up then the question of the nature of gummata, he differed from some other speakers in thinking that those of syphilis are specific, and that those of the exanthemata are not so, citing thrombosis, necrosis, catarrh of the middle ear, and the parotid bubo of typhus, which may be due to other causes than the specific fevers. He cited the fact alluded to by Mr. Hill, that severe tertiary often followed mild secondary lesions as tending to show a specific character of the former. Strangely enough he pronounced himself as an advocate of the old theory, now renounced even by its former advocate, Mr. Hutchinson, that a woman could be infected by syphilis from a fœtus, and become more syphilitic by such pregnancy. He came to this conclusion from the observation of cases of nervous affections in mothers who confessed to have had syphilitic children, and by seeing the disease in a more intense form during and after each pregnancy. It is evident that he had not in these cases clearly traced out the regular course of the syphilis. The next speaker, Dr. Buzzard, as might be expected, touched chiefly upon the nervous phenomena of the disease, and briefly gave some interesting facts. He thinks that the frequency of occurrence of nervous troubles in secondary syphilis has been underrated. Of one hundred cases of brain syphilis cited by him the average age of the patients was thirty-five. In eighty three cases the date of infection was ascertained, the nervous phenomena supervening after five years in fifty-six, and within that period in twenty-seven. In short, in one-third of the cases the nervous system was involved within five years of infection. The supervention of nervous trouble in the eighty-three cases was as follows: below five years, 27 cases; between five and ten years, 23; ten to fifteen, 25; between 15 and 20 years, 6; 20 to 25 years, 2. Of the twenty-seven cases in which the troubles came on within five years, six occurred under two years, four under three, six under four, and eleven between four and five years; the affections being hemiplegia, convulsive disorders and paraplegia. Optic neuritis was not observed under three years, but in the one-hundred cases occurred fifteen times; in twenty there was paralysis of orbital muscles; in five, disseminated choroiditis, and old iritis in two cases. The symptoms of the early nervous affections did not present any marked peculiarity from those of the later ones; they were of the order of vaso-motor irritation, such as disposition to fainting, contraction of retinal vessels, large pupil and acceleration of the heart. He had seen mental symptoms, in some cases almost maniacal, in early syphilis. He coincided with the hint thrown out by Mr. Hutchinson as to the relation of tertiary lesions to the secondaries through tissue change induced by the latter, and suggested that perhaps this occurred through the medium of the lymphatic system. He cited instances showing a tendency in syphilis for lymphatic canals and bursal sacs to be involved. The next speaker was Sir Wm. Jenner, who, being urged by

the President of the Society, with seeming reluctance made some short and significant remarks. He did not think that the manifestations of all acute diseases were symmetrical, nor that symmetry of distribution was necessarily an expression of blood disease. He thought that there were sequelæ of acute specific diseases which were in nature specific, and cited as instances the paralysis of diphtheria which were undoubtedly the result of blood disease. He evidently thinks, though his remarks were so terse and brief that we judge so only from their general tenor, that most of the so-called sequelæ of the exanthemata are really "mere accidental disturbances of nutrition." Thus far in the argument this is the only time that this aspect of the question of the nature of the sequelæ of the various affections has been broached, and it is to be regretted that it was not considered in all its bearings, as it is really vital to the question of the simile to determine really which are sequelæ of these exanthems and which merely, as very properly called, accidental disturbances of nutrition. The remarks of Sir William upon the pathology of infantile syphilis showed that he had studied closely into its nature, and we regret that he did not express himself at greater length and with more precision. He thinks that the sperm cell contains the infecting element of syphilis; that this body contains, as he terms it, "the potentiality of development," and that its chief and primary action is in the tissues, while the blood is secondarily involved.

Reviews and Notices of Books.

An Elementary Treatise on Diseases of the Skin. By Henry G. Piffard, M.D. Macmillan & Co., London and New York. 1876.

It may be accepted as a favorable indication of the rapidly increasing attention which is now being paid to skin diseases in this country, that we have here written by our American authors a systematic treatise upon them. Though Dr. Piffard's work is really not the first treatise on skin diseases written by an American, as Worchester published a quite extended volume in 1845, it may be said to be the first really scientific and noteworthy effort, as the older treatise was a simple compilation of indifferent merit. From Worchester's day until within ten years little was practically done in relation to these affections; but since that time many monographs of merit, upon skin diseases, have been published, and American authors came to be looked upon with respect on the continent. Among these physicians Dr. Piffard has occupied a prominent place, and it has been generally known that he has for years devoted his time and attention to the study of dermatology. Coming then from a man who has an acknowledged position as a dermatologist, the work claims our earnest attention; while as an exposition of American thought and experience it will be looked into very critically.

The first chapter is certainly, in every respect, an excellent one, and will very much influence the reader in the author's favor. The anatomy of the skin is there described in a simple and true manner, and the text is illustrated by plates, duplicates of those used by Sappey in his classical work on anatomy, the mere mention of which fact will attest their worth and appropriateness. The rudiments of the study of skin diseases are well given in the chapters on physiology, pathology, symptomotology and diagnosis. Indeed it is a pleasure to see this branch of the subject, so very necessary to one who wishes to understand dermatology generally, presented in such an admirably clear and simple manner. Much profit will certainly be derived from a thorough mastery of this portion of the work. Coming now to the vexed question of classification, we find that the author, true to the views which he has so long and strenuously advocated, adopts as a basis of his work a division of skin affections into groups based upon cause; in short, an etiological classification. It would be both unnecessary and inappropriate here to discuss this question, and we shall simply say that for those who believe that certain diatheses are the causes of cutaneous affections, the classification of the author will be acceptable; while for others it need not render the work less useful, as the question of causation is at best a moot point, and we have in the text other interesting and important matter in the way of general considerations, clinical history, therapeutics, *et cetera*. After a very good chapter on the syphilides, in which the author has evidently aimed at simplicity in their division, we come to the treatment of the varieties of lupus called by Dr. Piffard scrofulides. As he thinks they are the direct expression of a diathesis, he assumes the fact as settled forever, and does not address the merits of this question. In this chapter, in which Hardy's division is fully accepted, we find evidence of much original work in the microscopical study of the pathology of the various forms of the disease. The views of other observers are fully considered by themselves, and in the light of the author's experience. Perhaps some surprise will be excited in the mind of the reader when he finds that rodent ulcer is classed by Dr. Piffard as a variety of lupus, and that microscopical appearances have led him to adopt that view. This fact is strikingly suggestive of the suspicion that, although much can be done by the microscope to simplify the division of skin lesions, definite conclusions can only be arrived at after long years of extended and comparative study. Less exception, however, can be taken to the chapter on the treatment of the scrofulides (lupus), in which much practical information is given; indeed the directions for the management of these obstinate affections are noticeably superior to those of treatises in general. Following the scrofulides we come to the chapter on rheumides, under which term the author includes eczema, psoriasis and pityriasis, considering them an expression of a diathesis, which until now we have been familiar with, according to some authors, as the dartrous, herpetic or arthritic, but which, for reasons fully given by Dr. Piffard, he thinks should be called the rheumic diathesis. This morbid state is said to be that in which there is a condition of suboxidation going on in the tissues, which manifests itself by various affections, notably those of the skin.

In coming to these conclusions, the author has evidently been much influenced by the views of Gigot, Luard and Bence-Jones. We will not here further discuss the question, but will, in justice to Dr. Piffard, state that while he has advocated the existence of this hypothetical morbid state, he has also paid much attention to its investigation, and he considers the question involved in it in a thoroughly scientific manner

This question is one of too much importance to be slurred over or ignored; hence, due attention should be paid to the views of the author, as stated in his work. The fact of the adoption of the opinion by Dr. Piffard, that diatheses are, more or less remotely, the cause of skin affections, is interesting as showing how the views of French and English authors are accepted in this country, where, of course, they will be spread by Dr. Piffard, in his college lectures. While we speak with some hesitation upon the views of the author, as to causation, we must state our approval of the manner in which he has described the so-called diathetic diseases, and endorse heartily his clearly laid down directions for treatment. Indeed we may say here, as applying to all affections included in this book, that their clinical history is written in a simple, terse, and graphic manner; and further add, that the therapeutical portions are noticeable for their simplicity and appositeness. Space will not admit of the consideration of further affections in particular, therefore our further remarks will be general in character. Every affection liable to be met with is well described; all questions relating to it are fully considered; the views of others are given, criticised and accepted, when deemed proper by the author. There is evidence throughout the work of much study of the writings of others and of personal clinical observation. The descriptions given by the author show him to be a man who possesses the faculties of observation and induction in a marked degree. In no other similar work, except Neumann, can one find as much information upon the pathology of the skin, as developed by the microscope, as in the one under review; and much of its value is on this account. Dr. Piffard, however, has avoided an error which very greatly impaired the usefulness of Neumann's work; in making histological pathology only an accessory feature—and in devoting, as should properly be, the greater space to clinical history in general—so that his work is a guide to the clinic, and not to the microscope. In justice to Neumann it must be added, that his later editions have been improvements in this direction. Taking the whole work into question, we must express our decided conviction that it is an admirable guide to the study of skin diseases, and as such will prove, by reason of its terseness and simplicity of statement, a great help to those studying these affections. As a sample of American medical literature, we may certainly point to it with pride, as it will certainly compare favorably with the works which we now consider as classics; doing honor, not only to its author, but also to the country from which it emanated. The general "get up" of the book is all that one can desire; the type is large, clear and sharp, and easily read, and the paper and binding are excellent—indeed the work is like all emanating from the publishing houses of the Messrs. Macmillan; as nearly perfect as possible. Lastly, we must call attention to the numerous valuable illustrations, very many original, which, as works of art, are commendable; and as explicative of the text, excellent.

National Surgical Institute.—The "protest" sent to the New York Academy of Medicine by the "District of Columbia Medical Society," against the "bill to incorporate the 'National Surgical Institute,'" having been concurred in, was signed by the President and Secretary, and, under the seal of the Academy, forwarded to Washington, D. C. It was duly presented to the Senate by Senator Conkling, and referred to the appropriate committee.

Reports of Societies.

MEDICAL SOCIETY OF NEW JERSEY.

ONE HUNDRED AND TENTH ANNUAL MEETING.

The one hundred and tenth annual meeting of the Medical Society of New Jersey was held at Cape May on Tuesday and Wednesday, May 23d and 24th. Every district medical society in the State, excepting Somerset, was fully represented. Delegates from Maine, Massachusetts, Rhode Island, New York, and Pennsylvania medical societies were present. Among the invited guests we noticed Drs. Agnew, Pepper, Goodell, Atkinson, Dunglison, and Lewis, of Philadelphia.

The meeting was called to order at eight o'clock Tuesday evening; Dr. Wm. O'Gorman, of Newark, the president, in the chair. After the transaction of the regular routine business, the remainder of the evening was devoted to the reading of the annual address by the president, the subject of which was "External Influences on Medicine." The president in his address traced the influence of prevailing dogmas and systems of philosophy upon the progress and development of the science and art of medicine in a way that was at once new and attractive.

After adjournment the company, together with the ladies, in all about four hundred, sat down to an elegant banquet tendered by the physicians of Cumberland, Gloucester, and Cape May counties. Speeches were made by Drs. Agnew, Atkinson, Pepper, Cohen, E. M. Hunt, and Rev. Mr. Garretson and others.

PREVAILING DISEASES—PROGRESS IN THERAPEUTICS.

The Society reassembled at nine o'clock Wednesday morning, when the reading of the report of the standing committee was made the first order of business. The report was read by Dr. Wickes, the chairman, and exhibited, with a single exception, a diminished amount of disease throughout the State.

The ordinary contagious forms in children have appeared as before, measles being in the advance. Scarlet fever has appeared in less amount and with less serious manifestations than in former years. Fevers, remittent and intermittent, have not claimed the attention of physicians to any degree. Rubeola, or German measles, has prevailed extensively in Essex. Diphtheria has been the only serious epidemic, and it has been the scourge of the year. In Tuckertown, in a population of 800, there were 150 cases.

QUININE AND SALICYLIC ACID.

In therapeutics there seems to be a growing tendency to the use of very large doses of quinine. Chlorine, in the form of Tr. ferri chloridi and potassii chloras, has impressed many practitioners with its value as a topical application in malignant sore-throat and diphtheria. Salicylic acid has disappointed many, but in the hands of others has proved valuable when used locally.

ELASTIC LIGATURE FOR REMOVAL OF TUMOR.

Among surgical appliances is noted the employment of the elastic ligature for the removal of a malignant tumor from the subclavian region in a lady aged seventy, which measured in its longer diameter five inches, in its shorter three, had been four years de-

veloping, and four months in a state of ulceration, with a fetid discharge, and an occasional hemorrhage. The ligature gave but little inconvenience, and the general condition of the patient began to improve at once. In nine days separation was so nearly complete that the remaining tissue was cut with the scissors, not a drop of blood escaping. Cicatrization was complete in a month, and the patient's health was equal to that of most persons of her age.

TOPICAL APPLICATIONS IN MALIGNANT SORE THROAT.

The committee solicited replies from the reporters upon the following subjects: "The value of topical applications in malignant sore throat," and "In what degree calomel is relied upon as a therapeutic agent?" and deduced from their reports these conclusions as the sentiment of the Faculty.

As to the first:

1. Topical applications are not curative except it may be in the formative state of the disease.

2. They cannot with propriety be wholly ignored. They become valuable aids to successful treatment, as disinfecting, soothing, and cleansing agents.

3. The irritating and more heroic applications of a few years since are generally abandoned as hurtful.

4. The main reliance for cure must be placed upon remedies addressed to the morbid constitutional conditions.

As to the second:

1. That the very general opinion of our medical men is, that calomel is a valuable therapeutic agent.

2. That in many morbid conditions it is relied upon as the best.

3. That as a cathartic in certain cases, as an alterative in others, and as an antifibrinator, it is almost indispensable.

And the lesson which the discussion of the whole subject furnishes is, that a valuable drug should not be abandoned, and "its name cast out as evil," because it is unpopular.

The necrological list for the past year contains thirteen names.

A half hour was appropriated for remarks upon the report, which was improved by Drs. Hopper, Ridge, Rogers, Garnet, Cohen, and Atkinson.

MISCELLANEOUS PAPERS—MEDICAL HEROISM.

An essay was read by Dr. J. S. Cook on "Our Climate, and its effect upon Disease," which was well received and was ordered to be published in the Transactions. Other papers were presented, but for want of time were read by title only, and referred to committee on publication. One by Dr. E. P. Townsend, on "Medical Heroism," portrayed some of the trying scenes in which every physician must of necessity be placed, and the occasion where the highest type of bravery and courage are required,—not only the mere physical courage to perform operations, but the courage to work beyond the mere routine of authoritative medication and assume the control according to his own practical judgment.

MENTAL PATHOLOGY AND CRIMINAL LAW.

Another paper was by Dr. R. M. Bateman on "Mental Pathology and Criminal Law," in which he reviewed the subject under the following heads: Different hypotheses to explain the evidence of non-congenital insanity; increase of insanity; prevalence of moral insanity; difficulty in distinguishing real and simulated insanity; this difficulty, in diagnosis, used by criminal lawyers in behalf of their clients; the facility with which wealthy criminals escape punishment upon the plea of insanity; case of Charles K. Landis noticed at length; importance of a change in penal legislation; abolition of capital punishment advocated, and certain modifications suggested which would render punishment certain. The essay closed with a consideration of the duties of medical men in reference to the general question of "reform," especially in these times of corruption.

The degree of M.D. was conferred upon Louis Rein and Edward Mueller, of Hudson County. Dr. Weir Mitchell, of Philadelphia, was elected an honorary member. Dr. E. J. Marsh, of Paterson, was appointed Essayist for the next annual meeting.

DEATH OF DR. A. W. WOODHULL.

The following resolutions upon the death of Dr. A. W. Woodhull were adopted:

Whereas, This society has been informed of the death on the 14th instant, of one of its delegation members, Dr. Addison W. Woodhull, of Newark; therefore,

Resolved, That in his death we mourn the loss of one esteemed for his intelligent and faithful counsels; his discriminating judgment, his intellectual worth, his skill as a physician, and his patriotic services to the State and country;

Resolved, That in his death the country, as also the State, loses one of its most valued citizens, and that as fellow-members and co-workers in the profession, we deeply feel this sad bereavement, and we extend our sympathies to his stricken family and friends;

Resolved, That this expression of the feelings of this society be entered on the minutes, and a copy be sent to his family.

ELECTION OF OFFICERS.

The following were elected as the officers of the Society for the ensuing year: President, John V. Schenck; Vice Presidents, H. R. Baldwin, John S. Cook, and A. W. Rodgers; Corresponding Secretary, Wm. Elmer, Jr.; Recording Secretary, Wm. Pierson, Jr.; Treasurer, W. W. L. Phillips; Standing Committee, S. Wickes, S. Lilly, and J. L. Bodine.

Delegates to American Medical Association for 1877.—H. A. Hopper, S. C. Thornton, H. G. Taylor, T. J. Smith, W. Love, P. S. Heritage, J. W. Hunt, Samuel Lilly, E. P. Cooper, S. B. Brown, J. R. Leal, H. R. Baldwin, Wm. Armitage, John Vought, Joseph Hedges, T. H. Tomlinson, and P. F. Brakely.

New Hampshire: C. O. Gordon. *Connecticut:* E. J. Marsh. *New York:* E. B. Silvers, H. Mitchell, Jos. Parish, E. Maston. *Pennsylvania:* C. H. Voorhees, H. C. Clark, Wm. Elmer, Sr., and W. Blundell. *Rhode Island:* C. F. Deshler, T. J. Thomason, and S. Lilly. *Massachusetts:* J. J. Pendergast, J. L. Bodine, J. B. James, and J. G. Ryerson. *Maine:* G. H. Balleray, B. F. Carpenter, C. O. Gordon.

International Medical Congress: J. M. Ridge, John Woolverton, Ezra M. Hunt, John C. Johnson, Charles Hasbrouck, Abram Coles, and A. A. Latkins.

The next meeting of the Society will be held at Trenton.

MEDICAL SOCIETY OF COUNTY OF NEW YORK.—At a Stated Meeting of the New York County Medical Society, held May 22d, 1876, the following gentlemen were elected members: Drs. Charles Stein, Philip F. Goldberg, Henry C. Eno, Emil W. Hieber, Frederick Lemcleder, and Robert Abbé.

On motion, the Secretary was authorized to furnish credentials to members desiring to serve as delegates to the American Medical Association at its session in Philadelphia, commencing June 6th, 1876.

Correspondence.

CENTENNIAL MEDICAL AFFAIRS.

(From our Special Correspondent.)

GOVERNMENTAL CONTRIBUTIONS—HOSPITALS OF THE MEDICAL DEPARTMENT OE THE U. S. ARMY—THEIR ARRANGEMENT AND METHODS OF CONSTRUCTION.

PHILADELPHIA, May 29, 1876.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—The crowds that daily throng the avenues of the Exposition buildings, and wander—often aimlessly—through the attractive grounds surrounding them, generally take but little heed of numerous interesting features which professional men alone can thoroughly enjoy and appreciate. Occasionaly the promiscuous sight-seer strays into the building of the U. S. Army Medical Department, but with a puzzled air, as if he did not quite comprehend all that he saw in it, or as if he were merely paying a brief visit to an expectant hospital, awaiting the arrival of sick and wounded occupants of its beds; whereas it is only a model of a post hospital in all its details. Through various portions of the Exposition the medical feature is one of great moment, and well worthy of study. There is a prospect, during the present and the ensuing week, that an army of medical explorers will make diligent search for all these treasures of science and art. The State Medical Society of Pennsylvania, to meet on Wednesday afternoon next, in this city, will undoubtedly be the largest representation of medical men of this State that has ever assembled. The temptation to visit Philadelphia at this time is so great, that each county delegation will probably be complete without a single vacancy. Many of these gentlemen will remain over until the following week, to take part in the deliberations of the American Medical Association. How many delegates will be present on the latter occasion it is difficult to predict; but, from the preparations made by the Committee of Arrangements for their entertainment, it is fair to presume that from fifteen hundred to two thousand members—new and old—are expected. In the hurried view of the exposition that most of our medical brethren will take, the isolation of the purely professional portions from the other attractions offered will be simply an impossibility. We would not suggest to them any programme that would embarrass them in the limited time they must necessarily allot to the whole grand display. The main building being close at hand, after the visitor passes the registering turnstiles, at one of the numerous entrances to the grounds, he naturally wends his way at once to its capacious aisles, and, in the general admiration of everything æsthetically beautiful, he forgets for a while his own special medical tastes and professional inclinations, and possibly passes slightingly objects of peculiar interest to him as a physician. Probably the most satisfactory plan to pursue, in order to study systematically the medical aspects of the Centennial, would be that which we propose to follow in the present series of papers upon the subject. Giving the first place to Governmental contributions to the Exposition, the individual exhibits, although of equal importance, will claim subsequent consideration.

The U. S. Government Building occupies a prominent position in the Centennial Exposition, not only from its imposing character externally, but from the varied nature of its contents, which embrace the chief features of utility, development, and working machinery of each department, and of the Smithsonian Institute. It occupies about two acres, and forms an excellent exhibit of the resources of the country, so far as they are controlled and conducted by the general Government. There is much here that will interest the medical man from its purely scientific character. The *Model Army Hospital* is, however, a distinct building, only a few yards distant, and what may be termed an annex to it. It is designed to represent the system of hospital construction actually employed by the medical service of the army, both in peace and war. Several pamphlets—from which we take the liberty to quote—have been issued by Asst. Surgeon J. J. Woodward, U. S. A., explanatory of its construction and of the appliances of various kinds on exhibition here. At the close of the recent war, great diversity existed in the style and arrangement of post hospitals, and it was soon found expedient to attempt to secure greater uniformity by establishing general regulations for their construction. These hospitals were, by order of the War Department, planned to contain twelve, twenty-four, or thirty-six beds, and, after various modifications, rules for their construction were approved by the Secretary of War, and issued as Circular No. 2, S. G. O., July 27, 1871. The regulation post hospital for twenty-four beds, which have been built in the Exposition grounds, is described as a frame building, with a shingle roof, surrounded by a veranda. It consists of a central administration building, 35 feet front by 39 deep, and two stories high, with a two-storied back-building 40 by 14 feet, and two wings 45 feet by 24, one for each ward of twelve beds. The floor of the whole building is raised three feet above the ground, and is well supported on timber posts. In the plan of the ground floor are the wards, each 24 ft. by 45; dispensary, 14 ft. by 15; office, 14 ft. by 15; mess-room, 14 ft. by 20; kitchen, 14 ft. by 14; nurses' room, 14 ft. by 15; earth closets, each 9 ft. by 9; bath-room and lavatory; closets; pantry, 8 ft. by 10. In the plan of the second story is the steward's room, 14 ft. by 15; spare room, 14 ft. by 15; attendants' room, 14 ft. by 19; store-room, 14 ft. by 15; room for violent patients, 14 ft. by 20. All the walls and ceilings are lathed and plastered with two coats, the finishing coat being plaster of Paris, and the entire woodwork, usually painted, is covered with two coats of paint.

The wards are 15 ft. high in the clear from floor to ceiling. Ridge ventilation is provided for the summer months by means of two boxed openings in each ward, carried from the middle line of the ceiling to the ridge. These openings are 10 feet apart, and are each 10 feet long by 2½ feet wide. In the winter months the opening at the ridge is to be closed, and ventilation effected in the following manner: A large stove is placed in the middle of the ward. Fresh air is introduced by an air-box 18 inches square, which passes underneath the floor of the ward from side to side, open at each extremity to the external air, and opens in the centre of the ward beneath the stove by means of a register; when a ventilating stove is used, the place of the register is occupied by a pipe, which connects the air-chamber of the stove with the air-box beneath the floor. The pipe of the stove passes up through a close-fitting collar in the ceiling. One foot above the ceiling it enters a shaft or jacket about 24 inches in diameter, which pierces the roof, and extends four feet above; it is covered with a sheet-iron cap, pierced in its turn by the stove-pipe, which is capped in the same manner. At each end of the ward, and two

feet from the centre, there is an opening in the ceiling one foot square, from which an air-box passes to a box enclosing the lower mouth of the shaft surrounding the stove-pipe. The heat of the stove-pipe causes a continuous upward current in this shaft, which is supplied by the vitiated air from the ward through the air boxes. In each of the earth closets there is a ventilating shaft six inches square, and the gas-burner of the room is situated directly beneath it. These earth closets in the regulation hospitals are intended for very sick patients only, accommodations for other patients and the attendants being provided in a suitable detached building. A small detached building is also intended to be provided for the purposes of a dead-house; and cases of small-pox and other contagious diseases are to be treated in hospital tents.

In fitting up this building for the Exhibition of 1876, the rooms are occupied as follows: On the first floor a ward, serving for the exhibition of hospital furniture, bedding, and clothing; a room for the exhibition of the models of hospitals, hospital steam vessels, hospital railway cars, ambulances, etc., and for specimens from the Army Medical Museum; while the other rooms are used for the exhibition of medicines, medical stores, and chemicals; surgical instruments, books, blanks, and the publications of the Surgeon-General's Office, mess furniture and utensils, kitchen utensils, and the private office of the surgeon in charge, and the rooms in the second story serve for the exhibition of prothetic apparatus, litters and stretchers, medical panniers, knapsacks, etc.

The five small models of hospitals on exhibition represent a barrack ward, as adopted by the War Department in the summer of 1864, and four of the great general hospitals, so-called, which attained celebrity during the war.

The officers on duty at the Model Post Hospital, at the Exhibition grounds, are Asst. Surgeon J. J. Woodward, U. S. A., and Asst. Surgeon H. C. Yarrow, U. S. A., with Hospital Steward F. D. Price and clerk; and several other hospital stewards, selected from the different departments, are on duty here.

We learn also that the models of hospital cars and vessels on exhibition in this building are intended to represent especially those methods of adapting the ordinary rolling-stock of American railroads, and the ordinary steamboats of the interior rivers of the United States, and the merchant steam-vessels of the Atlantic coast, to the transportation of sick and wounded soldiers, which were found to be most satisfactory during the late war.

R. J. D.

DUMB-BELL PESSARIES, Etc.

To the Editor of The Medical Record.

Sir:—My attention has been called to the discrepancies between the cut intended to illustrate the position of the "Dumb-bell Pessary" and the text of my article in the Record for May 6th in reference to the same. Upon reading the article by Dr. Page, in the Record of the date of the 20th, I find that he has been misled by this unfortunate cut, and I fear other readers, through its agency, may have misconceived the application of the instrument.

The figure of the section of the pelvis was selected by the artist from Gray's Anatomy, and the instrument adapted to it. It shows simply the position of the instrument with its bulbous extremities before and behind the cervix, and that, as will be seen, in a case of over-distended bladder. This cut represents the pessary in a disposition in which, as Dr. Page says, the support must depend upon a tenacity of the vaginal walls which is not found generally in cases of displacement. Now my recommendation of the instrument was based expressly upon its having given support in a case of relaxation of the vagina, in which all other forms of pessary had proved inadequate.

In Dr. Page's article in the last number of the Record, he gives three cases illustrative of his employment of his pessary; Case 1 is of prolapsus; Case 2, of anteversion; Case 3, of retroversion. In cases 1st and 2d, of prolapsus and anteversion respectively, the instrument was introduced between the anterior surface of the cervix and the posterior surface of the pubes. In Case 3d, of retroversion, one bulb was passed up into the cul-de-sac behind the cervix and the other rested against the pubes. From this it is plain that, to a degree, I misunderstood Dr. Page's mode of application of the instrument, supposing that it was in all cases used as in Case 3. It is in this mode of employment of it alone that I have had any experience, and I took it to be the mode of its employment in all forms of uterine displacement.

The case which furnished the text of my article was one of anteversion. This class of cases, it appears, have thus far been treated by Dr. P. by placing the instrument between the pubes and the cervix. It seems to me impossible that in my case this use of the pessary could have been successful; when, however, in virtue of the curvature of the instrument, the posterior bulb is carried up into the posterior cul-de-sac, the anterior rising up behind the pubes, the success was complete. The instrument employed in this manner acts on the principle of Hodge's horse-shoe pessary with a single curve. In Hodge's the distension of the vagina is mainly from side to side. It will be readily understood how much higher up in front or behind the cervix an extremity of the dumb-bell pessary can be carried than one of the horse-shoe; almost as high as the fingers can be carried, anteriorly or posteriorly as the case may be. It thus becomes a means of holding the uterus, after its reduction, more or less in its normal position. In this respect it imitates Hurd's or Grailly Hewit's anteversion pessary, or particularly that of Dr. Thomas's well-known anteversion pessary. Over the latter instrument the dumb-bell pessary has the great advantage that the instrument of Dr. T. cannot be introduced by the patient herself, while the dumb-bell can be introduced, always premising the knee and and breast position, with great ease.

In many cases of aggravated anteversion, with extreme relaxation, it has been found impossible to restore and maintain the uterus in its normal position as regards the axis of the pelvis, and our best gynecologists have been obliged to content themselves with simply supporting the uterus in the pelvis by any expedient that would accomplish this alone, disregarding the error of position, thus allowing a return of free circulation through the uterus. It is the obstruction to the circulation, sometimes to an extent to cause œdema of the organ, that often perpetuates the malposition. The dumb-bell raises the uterus bodily, and maintains in a position more or less corresponding to the axis of the pelvis.

In any case, if the anterior wall is unyielding, the anterior bulb will rest upon it, or rest against the posterior border of the pubes, while if relaxed the bulb will pass up correspondingly high in front of the uterus—the greater the relaxation the larger the instrument and the larger the bulb required. In this respect the instrument made with its bulbs of thin

rubber, has advantages. By the hypodermic needle and Davidson's Syringe either bulb can be expanded to a size to adapt it especially to the case in hand.

I claim nothing as my own in connection with this instrument; the credit of its invention and introduction is due to Dr. Page alone.

In regard to the "knee and breast position," I cannot refrain from again expressing my sense of its great value as a means of relief and of permitting the easy introduction of pessaries.

The practitioner who has not yet tried it should be apprised, that when his patient assumes this position, if he simply introduce his finger into the vagina, the atmospheric pressure will crowd the soft parts about his finger, and he will detect a certain amount of subsidence of the organs of the pelvis. Let him now lift up the perinæum or substitute the glass dilator of Dr. Campbell for his finger, and the atmosphere will rush in with a distinctly audible noise and he will, on again introducing the finger, be amazed at the change that has taken place.

JAS. D. TRASK, M.D.

ASTORIA, N. Y.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from May 20th to May 27th, 1876.

McCORMICK, CHARLES, Surgeon. To report in person to the Surgeon-General of the Army. S. O. 99, A. G. O., May 19, 1876.

CALDWELL, D. G., Asst. Surgeon. Granted leave of absence for one month, with permission to apply for an extension of one month. S. O. 90, Dept. of Texas, May 19, 1876.

FITZGERALD, J. A., Asst. Surgeon. Assigned to duty as Post Surgeon at Fort Lapwai, Idaho T. S. O. 54, Dept. of the Columbia, May 8, 1876.

BYRNE, C. B., Asst. Surgeon. When relieved by Asst. Surgeon Meacham, to report immediately in person at these Headquarters for assignment. S. O. 90, C. S., Dept. of Texas.

COMEGYS, E. T., Asst. Surgeon. Assigned to duty as Post Surgeon at Fort Duncan, Texas. S. O. 86, Dept. of Texas, May 13, 1876.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending May 27, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
May 20.....	2	5	63	3	48	79	32
May 27.....	0	3	71	1	35	71	11

AMERICAN NEUROLOGICAL ASSOCIATION.—The second annual meeting of this Association will be held at Association Hall, on Wednesday, June 7th, at two P.M.

THE SEASIDE SANITARIUM FOR DESTITUTE SICK CHILDREN, at the Sea-View House on the Long Branch Railroad, is about to be opened. An appeal to the public is made for money, clothing, bedding, etc.

FORENSIC INSTITUTE OF BERLIN.—The Berlin University enjoys the advantage of a forensic institute, which is connected with the morgue—*i.e.*, an establishment for the exhibition of all corpses found by the police or sent for medical inspection, and, as the case may be, for a forensic post-mortem. If the latter is ordered by the judicial authorities, students are not admitted, except as spectators or attendants on any demonstrations which the professor might give after the necroscopic proceedings. Those corpses, however, which are not disposed of in this manner are at present utilized to give the students facilities for performing a quasi-legal post-mortem themselves, in accordance with the new regulations drawn up for all forensic autopsies in Prussia last year. It is stated that during the five months since November last, when this practice has been followed, not less than fifty post-mortems have been made by the forensic students, mostly in cases of violent and sudden deaths. An institution like our coroner's inquest does not exist in Germany, though competent voices have been demanding something like it for a long time. So far, the judge's mind is the sole arbiter for an inquiry and the order of a legal post-mortem. The establishment of some central institution for this special purpose, in a great metropolis, connected with a medical school seems, however, to furnish unusual advantages for efficient performance of the work as well as for the progress of forensic medicine.—*Lancet.*

ASSOCIATION OF AMERICAN MEDICAL EDITORS.—The members of this Association will meet in the parlors of the Continental Hotel, in Philadelphia, Monday Evening, June 5th, 1876, at eight o'clock promptly. F. N. Davis, Secretary.

NEW YORK WOMAN'S HOSPITAL.—At a meeting of the Board of Governors of this hospital, Drs. Paul F. Mundé and A. A. Smith were appointed Assistant Surgeons on the service of Dr. Fordyce Barker.

FIRE-DAMP AND THE BAROMETER. — It is maintained by French savans that an explosion of fire-damp can be predicted thirty-six hours in advance by a fall in the barometer, and a warning signal service is suggested in France.

THE KENTUCKY INFIRMARY FOR WOMEN AND CHILDREN, at Louisville, was formally dedicated on the 22d ultimo. It consists of a three-story brick building, well adapted for the charity intended. The Medical Staff is as follows: Dr. David Cummins, Orthopædic and General Surgery; Dr. B. F. Grant, Diseases of Women and Children; Dr. Geo. W. Griffiths, Diseases of Women and Children; Dr. Richard C. Brandeis, Diseases of the Eye, Ear, and Throat.

SPECIAL HOSPITALS.—The *Lancet* deprecates the multiplication of small hospitals for the treatment of special diseases, and very properly favors the establishment of special departments in the large general hospitals.

CHARRIÈRE, the celebrated surgical instrument maker of Paris, died May 6th.

THE DEATH RATE OF PHILADELPHIA is officially reported as only 19.3 per thousand. The mean annual temperature for the last ten years has been 53.73°, and the average annual rain-fall about 45 inches.

Original Communications.

A CASE OF PERITYPHLITIS

WITH PERFORATION OF THE APPENDIX VERMIFORMIS AND RUPTURE OF THE WALL OF THE ABSCESS, CAUSING GENERAL PERITONITIS AND DEATH, SEVENTY-FOUR DAYS AFTER THE ABSCESS HAD BEEN FREELY OPENED, WITH REMARKS ON THE OPERATION.

By ERSKINE MASON, M.D.,

PROFESSOR OF CLINICAL SURGERY, UNIVERSITY MEDICAL COLLEGE, NEW YORK.

On February 26, 1876, I saw, in consultation with Dr. Daniel C. Logue, a gentleman 32 years of age, of very delicate constitution, suffering from an attack of perityphlitis with abscess. I had previously (Jan. 18th of the same year) seen him in consultation with Dr. L. while suffering from an inflamed irreducible hernia of the left side, which he had had since early childhood. The history of his present difficulty, as related to me by Dr. L., was as follows: On the 10th of February he ate heartily of mince pie at a late dinner. Soon after this he was taken sick at the stomach and vomited, and on the following day, while at his business, he complained of feeling "very chilly most all the time." The succeeding day while returning from his office in the afternoon, he was seized with violent pain in the ileo-cæcal region. He described this pain as being "most intense," and with difficulty he reached home. Shortly after reaching his house he was seen by Dr. L., who at once placed him under the influence of morphine, and the pain still being localized, the succeeding evening several leeches were applied, which afforded relief. Recognizing that in all probability there might be some difficulty about the caput coli or perforation of the appendix, he was kept quiet under the influence of morphine. His pain never radiated over the abdomen, but was confined to the ileo-cæcal region; though for several days the abdomen was very tympanitic. Four days previous to my seeing him, the bowels were moved by warm-water enemata, and he had several large evacuations without pain. At the time I first saw him his bowels were being moved without artificial means and without his knowledge.

My visit was made at 11¼ A.M. I found him, on the 16th day from the time he was first taken sick, with his knees drawn up, tongue dry and red, pulse 100 and temperature 102°, skin moist, and for several days previous had had some sweating, and this morning had vomited. He had not experienced any chilly sensation since he took to his bed, though during my visit he was seized with a chilly sensation.

Examination of the abdomen revealed the following: Upon the right side, extending from the iliac fossa, was observed a distinct tumor, dull on percussion, and which could be clearly defined—measuring in its vertical diameter to Poupart's ligament, 5 inches—transverse diameter, 5 inches. No especial pain over greater portion of the tumor; more localized at lower portion of tumor at Poupart's ligament. The rest of the abdomen was free from pain upon pressure, and its walls very supple. The diagnosis was only too evident of ileo-cæcal abscess, with possible perforation of the appendix. I advised immediate operative interference, but for several reasons it was deferred until the following day.

Feb. 27, at 11¼ A.M., I saw him again. His general condition was more comfortable, and he expressed himself as feeling better. Had vomited from the time of my previous visit till 7 in the evening. This morning had taken considerable mutton broth and enjoyed it; pulse 100, temp. 101°. No pain except over lower portion of the tumor, where abdomen was examined. The tumor had however increased, spreading one inch more towards the left side, and had also extended upwards, and the umbilicus was now somewhat projected. There had been no movement of the bowels since yesterday. It was now decided to operate at once, the patient and his friends fully recognizing the propriety of the same.

So strenuously was the patient opposed to the taking of an anæsthetic, that I yielded to his desire, and operated without it. Previous to opening the abscess I attempted a digital exploration through the rectum; owing, however, to the presence of an inflamed pile, this attempt caused such pain I was obliged to desist.

Benumbing the skin by application of ice, I introduced a No. 3 trocar, attached to the aspirator, into the tumor, at a point half an inch to the left and two inches above the anterior superior spinous process of the ilium. Pus, but chiefly a fluid like bloody serum, issued rapidly into the aspirator, and a pint was in this way evacuated. I then passed a curved bistoury along the side of the trocar as a guide, and enlarged the opening for an inch and a half. This incision gave rapid exit to another pint or more of the same purulent fluid, together with large shreds of a brownish material.

The finger introduced through this opening recognized distinctly the caput coli bound down in the fossa; the finger could readily be swept around in the cavity of this large abscess. No portion of intestines was detected save the caput coli. A tent was now introduced through the wound, and lower portion of abdomen covered by a carbolized poultice. There was but little odor to the fluid evacuated, and we could not be certain that it was, strictly speaking, feculent in character. He bore the operation remarkably well, and said he felt greatly relieved. Half an hour after the operation, when I left him, the abscess was still freely discharging.

Feb. 28.—Patient very comfortable, had passed a good night. Appetite better than for some days past; pulse 96, temp. 100½°. The poultices had been changed every two hours. Abscess had discharged copiously and still running freely. A small dose of morphine had been taken every four hours, and was ordered to be continued if circumstances required it.

March 1.—Patient has done well since my last visit. Pulse 96, temp. 100°, is free from all pain, tongue moist, appetite good. Abscess still freely discharging, though the fluid, still chiefly of the same character as at first, is more shreddy. Ordered quinine, two grs., three times a day. Otherwise, same treatment continued.

March 10.—General improvement has been steady since last note. Has taken no morphine for past four days. Last night during a movement of the bowels, which was natural, his hernia increased in size and became painful, and this has rendered him a little nervous. Discharge constant and abundant, last forty-eight hours become much more purulent and thicker, is of a strong feculent odor, several dark masses have been discharged, evidently fecal matter. A small mass of dark sloughy tissue was found on the poultice this A.M. This was handed to a gentleman for microscopical examination, but unfortunately it was mislaid by him, therefore as to its character we are unable to speak definitely. To the eye and feel, however,

it seemed to be a portion of intestine. I suggested the abscess be daily washed out with warm carbolized water.

March 29.—Dr. L. informs me to-day that he has daily washed out the abscess since my last visit. Patient did well till the 25th, when he had a slight rigor and his appetite failed. Has been sitting up in his chair for two or three days. On the afternoon of the 25th, was seized with pain on left side in the region of his hernia; but after a few hours this passed off. 27th, had a return of this same pain, and the pulse rose to 102, temp. to 102°. 28th, had a hard chill in the morning, and sweat all the day and evening, great loss of appetite, with great thirst, very drowsy, no pain over abdomen. Discharge for past few days has been very little and has had no feculent odor since I last saw him. Cavity of abscess will not now hold more than 2 oz. of water; when first washed out it would hold a pint before there would be any return of the fluid. I saw him this morning, found he had passed a very comfortable night, had more appetite for his breakfast than for some days. During the night abscess again began to discharge pretty freely thick yellow pus, free from feculent odor; pulse had fallen to 96, temp. 101¾°. I introduced a drainage tube, which passed in towards the left side, about 4½ inches. The induration of the lower portion of the abdomen which had always been present, had softened considerably on the right side, while in the median line and towards the left it was still well marked.

May 9.—I was requested to-day by Dr. D. L. Smith, who during the temporary absence of Dr. Logue from the city was taking charge of the case, to see the patient with him. Ever since my last visit he had been slowly gaining in strength, the discharge from the abscess was very slight and thin in character. Was sitting up for a short time each day, and two weeks ago changed his residence, which necessitated his riding a distance of about three miles, which he bore without any unpleasant circumstances, and so comfortable was his condition that he contemplated going into the country, a distance of several hundred miles, in a few days. The following is the statement made me by Dr. Smith, when he called on me to-day. May 7th, he complained of some pain in his right side, and on the 8th the pain had increased, and there was some tympanites; it also gave him considerable pain while washing out the abscess, so the doctor desisted from using the water as freely as usual.

At 1 P.M. on the 8th he had a hard chill, and another between 6 and 7 in the evening. At 9½ P.M. his pulse was 142, respiration 36, temp. 105¼°. Had been vomiting all the afternoon; abdomen tympanitic and painful upon examination. Was placed at once under morphine and quinine. Passed a restless night, and on the morning of the 9th, between 7 and 8 o'clock, he had another chill. Discharge from the abscess profuse, serous in character and strongly feculent in odor. Wind was also escaping from the opening, which was now very small. Stomach very irritable, nausea and vomiting being pretty constant. At 12 M. pulse 120; resp. 28; temp. 102½°; complains of great weakness.

I saw him about 2 P.M., and found his condition just as above stated. He complained of no pain, upon examination of the abdomen, which was very tympanitic, and the opening of the abscess was very livid and emitted a very offensive odor. Our patient was very evidently fast sinking, and as I supposed from the giving way of the walls of the abscess, a new perforation, or both, resulting in a general peritonitis. He sank and died May 11th, at 4 P.M., retaining consciousness till a half hour before his death.

Death occurred ninety-one days from the time he was first taken sick, and seventy-four from the opening of the abscess.

The following morning, under the greatest difficulties, we were enabled to make a partial autopsy. Upon opening the cavity of the peritoneum air freely escaped. The omentum was bound down over the small intestines by recent adhesions, and greatly discolored, almost as black as charcoal. Peritonitis was general, and the cavity contained serum with flakes of lymph and fæcal matter. The wall of the abscess was half an inch in thickness, surrounding and binding down the caput coli and the appendix; it also extended across the median line two inches below the umbilicus. Its cavity containing fæcal matter, would now not hold more than two and one-third ounces of fluid. It had broken into the cavity of the peritoneum on its posterior border, a little to the left. The caput coli, with the appendix, were so bound down, that it would have required more time to have removed it intact, than was given to us to make the examination; I am therefore unable to state exactly at what point the perforation in the intestine took place; but it was near the junction of the appendix and caput coli.

Remarks.—There are several features in this case which are to me of striking interest, and some of which I do not recall having seen mentioned in cases that have heretofore been published. If my memory serves me right, there are few, if any, cases in which an operation has been performed, where it was deferred to so late a day, viz., the seventeenth from the date of the attack. When the presence of a tumor could first have been detected in this case, I am unable to state; the doctor's attention was called to it, it is true, a day or two before I saw the case, and I believe he regarded it as sudden in its manifestation. Be that as it may, it had increased very rapidly.

The size of the tumor certainly was unusually large, and the amount of fluid at once discharged, exceedingly so. I have no recollection of reading of a case where such a quantity of fluid was at once discharged, and where the discharge, profuse at times, kept up almost constantly, with but slight interruptions for so long a period, viz., seventy-four days. The discharge from these abscesses, I believe, has always been decidedly purulent from the time of opening, and, in many cases, decidedly feculent in character. Such was not the case, however, in this instance; the discharge, at first, and during various intervals, being thin, watery and resembling bloody serum, though always, it is true, containing pus. It never became what could be called properly feculent in odor until several days had elapsed, when feculent material also issued from the opening.

With all this accumulation in the abscess, there was, and had been, up to the time of my first visit, not that amount of constitutional disturbance which one might expect to see in such a case. The second day after he was first seized, it is true, while at his place of business, he complained of feeling chilly all day. But from that time till my visit he never complained of any such sensation.

As to the mode of death:—When it occurs from perforation of the appendix, I think it will be found to take place on or before the sixth day in the majority of cases, and where abscess occurs, as a result of perforation or perityphlitis, and rupture into the peritoneal sac, causing death, they do so also at a comparatively early date. No case have I seen recorded where after so long an interval has elapsed from the time the

abscess was opened, and where its cavity was diminishing in size, and it seemed probable it would soon close, has it been known to have given way, causing speedy death.

If in any case we could suppose that such an accident would be prevented, by an external opening, we certainly would have thought that this case would be spared such a catastrophe. Had the opening been too small to allow the ready exit of matter, this perhaps might have been a cause of the result, but such was not the case. It admitted readily the escape of pus, and was freely injected every day.

On the part of some it might be urged that had a freer opening been made in an abscess the size of this, and then had it been dressed from the bottom with oakum or lint, as was done in some of the earlier cases operated on, the cavity would have been closed sooner and this accident of rupture of the sac would not have occurred.

I am not quite willing to view the case in this light; for the original incision, an inch and a half, certainly appeared large enough at the time of the operation to give ready vent to its contents, and the steady yet gradual contraction of its size certainly did not, it strikes me, call for any further interference on the part of the surgeons. Again, from cases that have been reported since Dr. Parker first drew the attention of the profession to this operation, it would seem that the large incision first made was not necessarily indicated, an opening that admits the free escape of pus being all-sufficient. As to the method of performing this operation, I would give preference in the majority of cases to the use of the aspirator first. This indicates at once the presence of pus, and if pus is not detected the least injury has been done; then the trocar affords a safe guide for the incision by the bistoury. The cause of the fatal termination of this case was of course perforation of the walls of the abscess, and escape of its contents into the peritoneal cavity, and general peritonitis ensuing. With such thick walls (they being a half inch or more in thickness), and at so late a stage of the operation, one would scarcely imagine they would be liable to give way. My theory in reference to this accident in my case is this: the opening of the intestine into the abscess had not yet been closed, and some foreign body passing from the intestine had lodged in some recess in the walls of the abscess, the daily injections which the abscess received were not successful in removing the same; and it, acting as a foreign body, excited irritation and ulcerative action, which resulted in a perforation into the peritoneal cavity, in precisely the same manner as we, unfortunately, frequently find a foreign material or hardened fæcal matter act in the appendix. If this idea is correct, it only proves, though it was unsuccessful in this instance, the necessity in the after-treatment of these cases, to resort after the first few days to a careful irrigation of the abscess. Its use certainly is beneficial in many ways, as we can not only keep the patient more cleanly, but we can diminish any disagreeable odor the discharge may possess, and by such cleanliness, we in this, as in other surgical operations, lessen the risks of septic infection. Though the attention of the profession, within the past few years, has been forcibly called to the subject of perityphlitic abscess, at least in this city, from the very striking and favorable results which have followed upon operative interference, still there is much for us yet to learn in connection with these cases; and until this operation has been thoroughly popularized, and the great benefit that is likely to accrue from operative interference more fully comprehended, I think it becomes the duty of those who have to deal with these cases, to give publicity to their cases, whether they are fatal or successful. These abscesses, it is true, have opened of themselves, both externally and into the bladder and intestine, and the patient recovered. But it would not be safe practice to wait, hoping for such a result to happen in every case. I have, within a comparatively short period, met with two cases where the abscess has discharged itself into the bowels and the patients have recovered. One case was a boy about 11 years of age, who had been suffering from symptoms of localized peritonitis in the right iliac fossa for several days, and where no tumor was detected. One night he had a rather free discharge of pus and blood from the bowel, and his symptoms rapidly abated. The other case was that of a gentleman about 37 years of age, in whom at my first visit one evening, a tumor was readily detected, but feeling easier at the time of my visit, an operation was postponed for suitable reasons; that night he had a copious discharge of pus from the bowel, and recovered. I have also met with two cases, where, following the usual symptoms which are supposed to indicate perforation of the appendix, or a localized peritonitis in the right iliac fossa from some other cause, small hard tumors were readily detected, yet under poultices and counter-irritation the symptoms gradually subsided and the patients recovered. One was in the person of a medical friend, whose case I watched with great solicitude for several weeks; the other, in a lady of middle age. I know similar cases have been met with, and the question to be solved, and one of great difficulty in these cases, is this: Do these tumors, just described, result from a collection of pus, or are they the result of some other inflammatory product? It is not within the scope of these remarks to discuss this point at present, but from their diminishing in size and eventually disappearing under treatment, I believe them due to plastic effusion alone; the result of a perityphlitis, probably without perforation. When abscess has already formed, it has at times been with great difficulty detected, owing to the great sensitiveness of the abdominal walls preventing a thorough examination, or to their distention from tympanites. One other cause which might mislead, is the cæcum becoming gradually distended with fæces. I have never seen this spoken of as a source of error in papers upon this subject, though I have met with it in practice in a case dying of perforation and general peritonitis on the sixth day. Here I thought there was an abscess forming, both from the sense of touch conveyed through the abdominal walls, as well as there being circumscribed dulness on percussion. When we are enabled to make it, rectal exploration will often throw great light upon the case, if not entirely clear up the diagnosis.

Though these remarks have been extended far beyond my original limit, I cannot close them without an allusion to the literature of the operation for the relief of these cases, and which has saved so many from an untimely end.

In my own mind there is not a question as to whom we are indebted for bringing this operation forcibly to our notice and popularizing the same, and it was he also, as far as we have been able to ascertain after some research upon the subject, who first did the operation.

The first published account of this operation that we have been able to find, is a case related by Mr. Hancock to the Medical Society of London, in 1848, he at that time being its President. The operation was done April 17th, 1848, and an account of the same is published in the London *Medical Gazette* for

1848, page 547. At the meeting in which this case was recited, considerable discussion, it seems, was called forth from the members on this subject. The operation, it would seem, did not meet the favorable adoption in England that it was entitled to, though the operation was successful, as we find no illusion to it by other English surgeons. Nor did the announcement of this case meet with a more favorable reception by surgeons in this country, though the case was republished in the January number of the American *Journal of the Medical Sciences* for 1849, page 193. Dr. George Lewis, also of this city, in the New York *Medical Journal* for 1856, in his elaborate paper on "Abscess and other Diseases consequent upon Lodgment of foreign Bodies in the Appendix Vermiformis," when alluding to Mr. Hancock's case in detail, advocates this operation. In spite of all this publicity given to the operation, and in the face of the fact, that the large majority of these cases if left to themselves, perished, it apparently was lost sight of.

It was not till 1867, when Dr. Willard Parker published his paper on this operation, in the MEDICAL RECORD for March 1, 1867, giving the history of four successful cases, that the operation was at once received by the profession, and became established among the very successful operations in surgery. His first operation was upon the person of a medical man in 1843, thus antedating the operations of all others as far as we are aware of. If he was not the first to publish a detailed account of the operation, the credit certainly belongs to him of forcibly instructing the profession on this subject, and popularizing the operation. It would seem then that we in our Centennial year, could claim this operation as one of the advances made in the field of American surgery.

172 W. 44th St., May 24, 1876.

ANIMAL HEAT AND ITS REDUCTION BY THE USE OF GELSEMIUM.

By G. H. GRAY, M.D.,

WEST MERIDEN, CONN.

THE cause of animal heat has long been a vexed question, and to my mind is by no means settled even now, despite the researches of modern investigators. In the arts and sciences, we find ourselves constantly going backward, and accepting, as most advanced, theories which have been discarded once or many times in the world's history. Of all attempts to explain animal heat, perhaps the oldest is to day the most correct.

Prior to the middle of the eighteenth century, the most approved doctrine was that of friction, or the action of "vital force," the latter term—itself unexplained—being used to account for all processes dependent upon some occult power at work in the animal economy.

Lavoisier originated the combustion theory, and has still many followers. He called the lungs a stove, and thought that oxygen combines directly with lung tissue. Bernard moved the stove to the tissues, as he discovered them to be warmer than the blood which came from them. Liebig called the blood the stove, and food the fuel. Berthollet, contemporary with Lavoisier, originated the theory that bodily heat is due to molecular as well as chemical changes, but he confined it to the process of hydration, and made only ingesta take an active part in it, instead of extending the activity to the ultimate structure of the body itself.

Marshall says:—"Respiration is therefore the functional source of animal heat, an important use of this function in the economy being to produce such heat." Unfortunately for this theory, the blood is cooler when it leaves the lungs than when it entered them, by one-third of a degree or more, although oxygen has been taken up and carbonic acid given off.

Dutrochet, indeed, quite overthrew the combustion theory, by his discovery that the vital heat of vegetables is greatest when oxygen is being exhaled, the opposite process being absolutely essential to combustion.

Dalton, after discussing the older theories and showing their unsoundness, gives us one quite as unsatisfactory, namely, that it "depends upon changes of a chemical nature, and is so far to be regarded as a chemical phenomenon." Marshall and Dalton sum up the subject of animal heat in very much the same manner, the former remarking:—"In the animal kingdom, considered generally, we observe that a high temperature of the body increases the activity of the various functions," and the latter saying:—"An elevation of temperature is accompanied by an increased activity of all the nutritive processes."

For my own part, I would transpose these two assertions, formulating the principle thus: an increase or diminution of the activity of the vital functions, is accompanied by a corresponding rise or fall of the temperature of the body; and there we have what seems to me a full and rational theory of animal heat.

The countless myriads of minute cells of which our bodies are made up, are constantly changing; change means motion, and motion means heat. Mr. Newport found that upon the interior of a hive full of quiet bees, the mercury of the thermometer stood at 48.5°, but when the community became excited by his rapping upon the hive, the temperature, as shown by the same thermometer, rose to 102°. Instances are too common of the correlation of motion and heat to require any proof; every child is familiar with them; so I will spend no time upon that point, except to call attention to the same argument used by the champions of combustion; *e. g.* Why should not a simple process like this be attended by the same results inside the body as outside it?

Of the very many facts and arguments which might be urged in defence of this view of the subject, I select only a few of the simplest and most common.

Berthollet's theory is criticised because it does not explain the higher temperature of animals which consume large quantities of carbon and hydrogen in their food, but it will hardly be disputed that all through the animal kingdom, the activity of the animal and the temperature of the body hold a definite unvarying relation to each other, from the lazy toad with his temperature of 51.6°, to the swallow whose rapid movements the eye can scarcely follow, and which thrives upon a temperature of 111.25°. The more active the animal, the higher his normal temperature: this theorem of course referring to species, and not to be confined to individuals where there may be exceptions.

We are familiar with the fact that exercise increases the temperature of a part or the whole of the body. The stage-driver transforms motion into warmth by striking his hands against each other, which is but a homely and practical illustration of Helmholtz's theory of solar heat. We stamp our feet when they are chilled, and we know that the coldest bodies—

even ice—rubbed together show an appreciable rise of temperature.

In the same manner as exercise of the muscles warms the parts of the body thus moved, the temperature of the brain is increased by thought or mental activity, and the blood itself varies in temperature in different parts of the system; as Claude Bernard found in the living dog, the blood of the abdominal aorta varied from 90.5° to 105.6°; of the portal vein from 100° to 106°; and of the hepatic vein from 101° to 106.8°. And when we come to examine the results of Bernard's experiments, as given above, we find just what we might reasonably expect. The aorta receives the blood directly from the heart, is a very large vessel, and probably hardly one blood globule in a million comes directly in contact with the *tunica intima*, hence a comparatively low temperature; but the blood of the portal vein has first been forced through capillaries, where every globule has rubbed against the lining coat of the vessel, and has come into somewhat violent contact with its fellows, the consequence being an increased heat, and before it has had time to recover from the effect of passing through the capillaries of the intestines, it is again propelled through a still finer network in the liver, from which it emerges by the hepatic veins, warmer than anywhere else in the body. Thus we find everywhere, activity and forcible contact increasing temperature, which takes us back to the seventeenth century, when physiologists explained animal heat by "friction and vital force."

Thus far we have been studying the normal heat of the living body, that of man being estimated at about 100° Farenheit; though a variation of 20° below and 13° above habitual temperature being compatible with a continuance of vital functions, while outside those limits vitality ceases and death ensues.

The existence of a definite amount of heat in the human body once granted, it is a self-evident proposition that, in such a delicate and complex structure, any deviation from the absolutely correct and physiologically proper mode of living, will be followed by a corresponding deviation from the normal condition of the various organs which make up the body, and consequently also in the products and influence of these organs.

We have seen how animal heat may be produced; the constant changes that are going on in the system being regulated and proportioned to each other so carefully, that the balance is perfect; and while such is the case we enjoy health or ease. But the physician has to do with disease, and in this state, whatever its cause, pre-eminent among symptoms stand variations from the normal temperature.

We are all familiar with a group of symptoms consisting of rigors, followed by increased heat of skin, quick pulse, languor, and lassitude, and to such, from ancient and honorable custom, we apply the term fever. For our present purpose it is sufficient to define this term as *abnormal heat of the body*.

Dunglison gives nearly two hundred varieties of fever, dividing them into two great classes; idiopathic or essential, and symptomatic. Almost every one who has written upon the subject has attempted to give a more comprehensive definition of the word than those who have preceded him, and the criticism of my definition would doubtless be, that it deals with but one of the group of phenomena which make up the condition thus designated.

But I believe all fevers—so-called—to be one and the same thing, save in their complications. To be sure, there is apparently a wide difference between variola with its pustular eruption, scarlatina with its sore throat, phrenitis with its delirium, intermittent with its three distinctive stages, and typhoid with its regular thermometric variations and intestinal complication. But the thermometer shows one condition common to all—an increase of temperature—and this seems to be the essential requisite for the name fever.

There is evidently some cause, ever ready to act, liable to assert itself in the most varied diseases, which produces this heat. That it is to some extent independent of the disease it accompanies, is shown by the fact that it rises and falls, with great regularity sometimes, as in typhoid fever, and in other diseases without any apparent system, and again may remain affected but little during the whole course of a malady. We can readily see how it may be *connected*, accidentally, as a cause, or as a result, with local irritation in any or every organ of the body, and so produce the multiform varieties which have in common the surname fever. But what *produces* an increase of heat? Undoubtedly irritation; this, according to Broussais, meaning "the condition of an organ, the excitation of which is carried to so high a degree, that the equilibrium resulting from the balance of all the functions is broken," or more simply, "excess of vital action." The results of irritation may be as diverse as are the morbid influences and their manner of application. In typhoid fever we have a specific poison which acts as an irritant locally, to a great degree, though having a secondary general effect. This general hyperactivity can be reduced by the drug about to be mentioned, but it is likely to recur unless the cause of the local trouble is eradicated.

Incise the skin of a living being, and the incision is followed by increased molecular activity, resulting in increased heat, redness, swelling, pain, &c., which group of phenomena we denominate inflammation. This is from *local* irritation.

Again, some poison or irritant finds its way into the blood, and through the blood into the general system. An increase of molecular activity results all through the system, resulting in increase of heat, pain, redness and swelling—that is, the headache, flushing and eruption—and that group of phenomena we call fever.

Dr. Lionel Beale, in his Lumleian lectures last year, in speaking on Life and Vital Action, says, "Fever is simply a general inflammation," and by an entirely different route we have arrived at the same statement.

To sum up then:

First. Animal heat is due largely, if not altogether, to vital activity, or the changes which are constantly being wrought in every part of the body.

Second. Fever is the perversion of a normal process or the hyperactivity of vital functions, and is due to local or general irritation.

Abnormal heat of the body has come to be regarded as somewhat independent of the diseases with which it is associated; for, in the fevers marked by a very high temperature, this single symptom receives more attention than any other; and that with the view of simply modifying the heat, not with any expectation of reaching the seat of the disease. Thus, the affusion and the wet pack in scarlatina, and the various expedients for overcoming the opposite condition in the cold stage of cholera and diphtheria, are directed toward bringing back a healthful temperature.

The poison of intermittent fever is eradicated by quinia, that of variola and some other zymotic diseases by the hyposulphites, syphilis by mercury and potassium; that is, these drugs exert an influence over the local or general irritating cause, but not upon the

secondary general excitement; this has to be met by what we term antipyretics.

If my theory be correct, this class of medicines act by restraining molecular activity, either directly through the blood, or indirectly by acting first upon the nervous centres.

If we had a single drug, upon which we could rely, to search out from all its accessories the active cause of abnormal heat, and put a stop to its action, we should think ourselves fortunate, and we would indeed possess an invaluable weapon of warfare against disease. That we have at our command such a drug in gelsemium, I fully believe, and after using it in every possible case for more than a year past, I am satisfied of its power to control the temperature of the body, without being either dangerous or hurtful in any way, if used intelligently and carefully. I have given it in the severe fevers incident to teething in very young children, in surgical fevers, typhoid, scarlatina, pleurisy; in fact, in every case which has come under my observation for some time past, where there has been a rise of temperature above that of health; and in not a single case has it disappointed my expectations of reducing heat and promoting comfort; and as I give it in very minute doses, I have never seen any of the reported ill effects upon the heart or nerves.

Gelsemium is prepared from the root of the *G. Sempervirens* or Yellow Jessamine, a beautiful climbing plant indigenous in our Southern States. Our Dispensatory has but a very brief and unsatisfactory account of it, and that little taken from the Eclectic Dispensatory.

The virtues of the root were discovered by accident: a planter of Mississippi, while suffering from an attack of bilious fever, sent a servant to gather a particular root, and directed him to make an infusion of it. The servant by mistake gathered the root of the wild Jessamine or woodbine, prepared the infusion, and presented it to the master. The effect was most alarming, and the friends gathered around expecting every breath would be his last; but to their surprise, as well as his own, he recovered, and not only that, but discovered that every vestige of fever had disappeared.

Thus brought to light, the plant was used secretly for a long time, was a few years ago admitted to the Dispensatory of the Eclectics, and has now a place on the secondary list of our Pharmacopœia.

There have been several articles written about it within a year or two, both here and in Europe, most of them denouncing it as uncertain and dangerous in its action; and several physicians with whom I have talked about it speak in a like disparaging manner, asserting that it disorders vision, prostrates the nervous system beyond the possibility of reaction, and can never be relied upon to effect just the object desired.

It has, like most everything else, had its devotees, who have claimed for it all possible virtues and powers. Carried to its fullest effects, it seems to relax the muscular system, with the exception of the uterus, which it acts upon like ergot, only more mildly; it has a peculiar and constant effect upon the third nerve, and as a febrifuge is unrivalled.

The latter is the only action of which I have made a special study; and, as I said before, I have never been disappointed in it as an agent for reducing temperature. A few cases will illustrate.

I was called to see a child one evening who had been listless, constipated, without appetite, complaining of headache and thirst for nearly a week. Was in bed, with a coated tongue, very hot, dry, and rough skin, flushed face, pulse 147, respiration over 40, and temperature 104.6°. I prepared a mixture consisting of ten drops tinct. gelsem.; ten grains potass. bromid.; and water half a small tumblerful, directing the mother to give a teaspoonful every hour, and afterward every two hours, until the fever began to subside, headache was relieved, and free perspiration had appeared. This was about eight o'clock in the evening. I called the next morning at nine o'clock—thirteen hours after—and found the child playing out of doors. The bowels were constipated for four days, but with this exception there was not a sign left of any disturbance; and even the bowel trouble, which I then attributed to the gelsemium, I concluded from subsequent observations was due to some other cause.

A severe case of typhoid fever, which occurred in my practice last summer, was treated with the same drug whenever there was a high temperature, with the effect of entirely breaking up the regularity of the morning and evening variations, and all through the third week of the disease keeping the heat below 101°.

A case where Dr. Francis Bacon operated for stricture, doing the perineal section, on the third day rigors set in, followed by the usual surgical fever, the pulse running up to 148, and temperature to 104° and a fraction. About seven o'clock in the evening he began taking the gelsemium, and when I called at nine the next morning, pulse and temperature were nearly normal, the latter not reaching 100°. I have now on hand a case of pleuro-pneumonia, in which between five o'clock in the evening and nine the next morning, the thermometer showed a reduction of the heat from 104.2° to 101.5°, due to the use of the same drug.

But perhaps the most remarkable case of late was one of scarlatina, which Dr. Catlin, of Meriden, saw with me. Between five o'clock in the evening, when I first saw the case, and nine the next day, when Dr. Catlin saw it with me, the temperature was reduced from 105° to 99.2; and during the whole disease, which lasted acutely only six days, the temperature never rose above 102°, except for a half day, when the gelsemium was stopped by mistake; then it rose to 103°, but was at once reduced to 101.8° by resuming the medicine. My usual prescription for a child less than five years old is:

℞ Tinct. gelsemium.....gtt.xx.
Potassii bromidi.....ʒi.
Aquæ.....ʒiv.—M.

Teaspoonful every hour until fever begins to abate; then every two hours, until free perspiration is produced.

For children from five to fourteen or fifteen, I give in four ounces of water half a fluid drachm of the gelsemium and thirty grains of the bromide. For adults, a fluid drachm of the tincture, and a drachm of the bromide, to four ounces water, with the same directions for taking.

It will be seen that the dose for a child is only about ⅛ of a drop, and the adult dose not two drops; and I think, as the full effects are obtained by these small, frequent doses, the complaints that are made against the drug arise from too large doses. At all events, the effects above related are sufficient to claim for gelsemium the attention of all who wish to avail themselves of the best means of combating fever; and, if every one has as good success with it as I have had, there will be but little fault found with it.

Lest some of the champions of bromide of potassium should say the above effects were due to that, instead of the gelsemium, I will state that for some time I used the latter alone, with quite the same effect upon the temperature, and combined the two for the quieting effect of the salt, gelsemium not producing very marked results of that sort in such minute doses.

Progress of Medical Science.

ANGINA LUDOVICI.—Mr. A. Doig reports several cases amongst the soldiers quartered in the South Camp, Aldershott, during the winter of 1874-75. They all presented the same symptoms as the cases reported some time ago by Dr. Murchison (RECORD, Feb. 26, 1876), but suppuration occurred in quite a number, and the following case ended fatally. The patient was 22 years old, and when first seen presented the usual symptoms. The submaxillary, sublingual and parotid glands were swollen and very hard. The swelling increased, and never lost its hard character; the skin became œdematous, and the breathing was very difficult. Incisions were made under the tongue and externally, but no matter escaped, and on the fourth day death ensued. Forty-three hours after death an examination was made, and a large swelling occupied the neck, chiefly on the left side, but extending somewhat to the right and down about midway between the lower jaw and clavicle. On removing the skin over the swelling, the tissues were found in a gangrenous state, being filled with a brownish-colored, very fetid, semi-fluid matter. All the tissues, including glands and muscles, were involved. The portion of the lower jaw in contact with the diseased glands was denuded of periosteum. The larynx was surrounded by the morbid mass, but the tissues posterior to the pharynx were not involved. The mucous membrane of the fauces, that covering the epiglottis, and the whole of the larynx were in an œdematous state. The lungs were deeply congested and contained hemorrhagic infarctions, and the lung tissue around contained numerous small deposits of tubercle. Both right and left cavities of the heart were filled with clots partly decolorized. The other organs were found to be in a normal condition.—*The British Medical Journal*, April 15, 1876.

TREATMENT OF TETANUS.—Dr. Leonard Cane reports the case of a man, 28 years of age, who had injured the great toe of his right foot by letting a heavy weight fall upon it. No really unfavorable effects occurred till three weeks after, when he was seen by Dr. C. He then complained of severe pains in his right toe, followed by cramps in the foot and ankle, with convulsive twitchings of the leg. The respiration at the same time was affected, and almost stopped during the paroxysms. Twenty grains of chloral were administered, and in two hours a similar amount given, when the patient became quieter and at last fell asleep. During sleep there were some slight twitchings. The following day there were still pain and cramp, and the chloral was given every four hours during the day, and by evening the spasmodic movements were very slight, and occurred at long intervals. The next day the cramp had nearly disappeared. Bromide of potassium ten grains, in combination with compound tincture of gentian one drachm at a dose, was given three times daily, and recovery was soon complete. Mr. G. W. Callender speaks highly of nerve-stretching in tetanus. Recently Verneuil, in a severe case of crushing of the hand, causing tetanus, exposed the median nerve at the elbow and the ulnar at the wrist, and used traction upon them. The recovery was complete. Mr. C. says the operation is not severe, and after the nerve is freed from its surroundings it is stretched with an ordinary vulsellum. The generally unsatisfactory results of the present treatment of traumatic tetanus, in his opinion, fully justifies the performance of the operation.—*The Lancet*, April 15 and 22, 1876.

EXCRETION OF BLUE URINE.—M. Ramondède reported to the *Société Anatomique*, on January 14, a case of gangrene of the mouth with interstitial nephritis, in which the urine had contained indican during the entire course of the disease. The autopsy showed commencing interstitial nephritis; the tissues of the kidney were blanched; the vessels, especially the veins, were surrounded by newly-formed connective tissue, and there were some ecchymoses. The spleen was the seat of multiple infarctions.

M. Robin called attention to the fact that the blue matter was not the same in all cases of blue urine. Neither M. Gubler nor himself had ever found the urine to contain indigo. Indican should not be confounded with indigo; it is produced by the action of oxidizing agents that destroy indigo. He referred to a case, formerly reported by him, in which the blue color of the urine was due to the presence of cyanurine. This cyanurine is a substance intermediate between urea and uric acid.—*Le Progrès Médicale*, April 22, 1876.

ALBUMINURIA PRODUCED IN CHILDREN BY THE TINCTURE OF IODINE.—At a meeting of the *Société Medicale des Hôpitaux*, on April 28th, M. Jules Simon stated that he had been treating tinea favosa in children by painting with a mixture of equal parts of tincture of iodine and glycerine. On April 4th, he applied this mixture to a little girl, without previous washing or epilation. It was noticed soon after that the child presented peculiar symptoms, and that the face had assumed a reddish purple color; and on examining the urine, the presence of both iodine and albumen was discovered. The urine of eleven children treated in the same way was examined, and in all found to contain iodine, and, in four out of the eleven, albumen. The albumen disappeared when the iodine treatment was stopped, and reappeared when it was recommenced. In two cases iodism was produced. The favus was cured about as readily as by other methods of treatment. The iodine was only applied to cases of pure favus without eczema or impetigo.

M. Dumontpallier said that he often treated diabetes by large doses of iodine tincture internally, and that he had never found albumen in the urine in those cases.

M. Jules Simon said that there was question here of children, and not of adults. He had found iodine but not albumen in the urine when iodide of potassium was being taken.

M. Archambault said that albumen is often present in the urine of young scrofulous and rachitic children, and asked if it were certain that the iodine produced the albuminuria in the above cases. M. Isambert stated that tincture of iodine in doses of four to twenty drops is given in some cases of chronic albuminuria, and that it reduces the amount of albumen.—*La France Medicale*, May 3d.

ADMINISTRATION OF SALICYLIC ACID. In view of the many therapeutic uses of salicylic acid, it has become important to find a menstruum that will dissolve it in sufficient quantity. The ordinary solution in some alcoholic vehicle contains so much alcohol, that it cannot be given to children or to women; while, on the other hand, the caustic character of the acid prevents its administration in suspension in a

mucilaginous fluid. M. Cassan, of Paris, believes that he has found the desired solvent in citrate of ammonia. While thirty grains of salicylic acid require an ounce to an ounce and a half of rum or cognac alone to dissolve them, if fifteen grains of citrate of ammonia be added to the acid, only two drachms of the spirit will be required to make the solution. The citrate of ammonia gives no unpleasant taste to the fluid. The following formulæ may be employed:

℞. Acidi salicylici, ʒ i.; ammon. citrat., ʒ ss.; spirit. vini Gallici, ℥ i.; aquæ destil., ℥ v. Or, for a single potion. ℞. Acidi salicyl., grs. xv.; ammon. citrat., ʒ ss.; syrupi simp., ℥ i.; aquæ destil., ℥ iv.—*Bulletin Général de Thérapeutique*, April 30.

A New Antiseptic.—A curious fact, interesting on account of its bearing on public and private hygiene, has been observed and reported by M. de Rostaing. A piece of meat, placed in a vessel containing powdered madder root, on the 27th of July, 1875, was found on February 27th, 1876, to be in a state of perfect preservation. It had not the slightest odor, and there had been no development of living organisms. This fact proved, he thought, the antiseptic qualities of the madder root, and M. de Rostaing suggests that it may be utilized in the preservation of cadavers and in improving the hygienic condition of cemeteries. A committee has been appointed by the *Académie des Sciences* to investigate the subject. —*La Tribune Médicale*, April 30.

Aniline Poisoning.—M. Laboulbène exhibited to the *Société Médicale des Hôpitaux*, on March 24th, a workman from a factory where the colors derived from aniline are made, who presented a marked and permanent amaranthine discoloration of the hands, feet, and hair. This discoloration made its appearance since he began to work near the vats, whence acrid aniline fumes, which were irritating to the eyes, escaped. Two months later he began to complain of pains in the penis and scrotum, and these parts became swollen, and have remained so since. One month after these symptoms appeared, he began to suffer from vertigo, loss of sexual power, and bitter taste in his mouth; but nevertheless his general health continued good, and he was not anæmic. There were no symptoms of arsenical poisoning, although arsenic was used in the manufacture of fuchsine.

M. Bergeron stated that he had seen several cases of aniline poisoning in which the skin and mucous membranes were discolored as in M. Laboulbène's case, but he had never seen œdema of the scrotum except in profoundly anæmic patients. The fumes of aniline, which are produced in great quantity at the moment of its transformation into fuchsine, cause vertigo, hebetude, weakness, somnolence, sometimes even epileptiform attacks, tetanic spasms, etc. In the end, the workmen fall into a condition of profound anæmia, with discoloration of the skin, lilac tint of the lips, anorexia, gastric disturbances, etc.; but this state of affairs is promptly corrected by respiration of pure air, or by inhalations of oxygen, and the use of evacuants.—*Gazette Hebdom.*, April 14th, 1876.

Spontaneous Abortion in the Early Months of Pregnancy.—Dr. Leblond, who has been studying this subject in its medico-legal aspect, gives in a small pamphlet the histories of eleven unprovoked abortions, in none of which the membranes were ruptured. He then quotes from several authors, who hold that in spontaneous abortions in the early months of pregnancy, as a rule, the embryo and its membranes are passed entire, and that rupture of the membranes is presumptive proof of a criminal abortion. In concluding, he sums up as follows:

1. When the embryo is contained in healthy and unbroken membranes, it is most probable that the abortion was spontaneous, unless it had been excited by means that cause expulsion of the egg without affecting its walls.

2. When the membranes are ruptured, but still healthy, it is probable that the abortion was provoked.

3. When the membranes present pathological alterations, no certain conclusions can be drawn from an examination of the expelled mass, but still it is probable that the abortion was the consequence of some primary disease of the embryo.

Syphilitic Arthropathies.—M. Voisin has just published a very interesting work, entitled *Contribution à l'Etude des Arthropathies Syphilitiques*, from which the following conclusions may be drawn:

1. Arthropathies exist in all the stages of syphilis.

2. In the primary period there are vague, multiple pains, to which the name of arthralgies is given.

3. In the secondary period these pains recur, but there are also inflammatory phenomena in various joints. These arthropathies resemble either a subacute arthritis, or a simple hydrarthrosis.

4. In the tertiary period they are chronic and resemble white swellings.

5. These arthropathies disappear under the influence of specific treatment.—*La France Médicale*, April 22d.

Extraction of a Living Insect from the Ear.—The *Archives Médicales Belges* relates the following case: A little girl, three years old, put an insect, '*bête à bon Dieu*,' into her ear. Sharp cries, agitation, convulsive symptoms, ensued: injections of water were made without result. The physician then conceived the idea of asphyxiating the insect by means of chloroform: he dropped four drops of chloroform upon a small piece of cotton which he introduced into the ear. Immediately the child ceased crying, and complained no further of any disagreeable sensation; the insect had become asphyxiated; an injection of warm water brought it away dead, and no further trouble ensued. *Dublin Med. Press & Circular.*

Treatment of Obesity by the Waters of Brides.—According to Dr. Philbert the waters of Brides in Savoy, which are very similar to those of Carlsbad, are very useful in the treatment of obesity. The purgative salts contained in these waters are sulphate of soda, chloride of sodium, chloride of magnesium, sulphate of magnesia, and sulphate of lime. To increase the effect, from 15 to 80 grs. of sulphate of soda are added to each glass of mineral water. The quantity taken daily is one litre, divided into three doses, and the purgative effect is produced in two or three days. The course may last from four to six weeks. As an adjuvant to the waters, a vapor bath may be taken every day or every second day. Farinaceous and saccharine articles of food are not allowed, and brandy, liqueurs, and coffee are interdicted; but the quantity of food is not limited, and a moderate amount of wine may be taken without harm. Muscular exercise is considered indispensable, and the mountains in the vicinity of Brides afford every facility for walking, where, in addition, this treatment may be followed by the grape cure.—*Journal de Méd. et de Chir.*, April, 1876.

Cautery in Treatment of Pedicle in Ovariotomy.—Mr. Thomas Keith reports the use of the actual cautery in 50 cases. The result was 92 per cent. recoveries, the best he has yet had.—*Lancet*, April 15, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, June 10, 1876.

THE SHORT-TERM SYSTEM.

In referring to our recent editorial upon the short-term system in Louisville, Dr. Gaillard makes the following remarks: "It was stated in this Journal (*American Medical Weekly*) that the recent publications of the RECORD 'are surprising blunders,' and this statement is repeated. It was believed at the time that the blunders indicated were unintentional; but this belief is now impossible, as Dr. Shrady, the editor of the RECORD, without a shadow of proof for what he has published and still publishes, 'is not sorry that he conveyed such an impression, as he intended to do so.' Whether the publication of injurious or even libellous statements, without a shadow of proof for their correctness, will, in the estimation of the profession, injure the parties libelled or the vehicle of the libel, each reader can judge for himself. If Dr. Shrady can prove his statements to be true, these statements and hims lf will receive the most courteous consideration. So far, there has been only assertion unfounded, and not sustained by a particle of proof. Dr. Shrady believes 'that such a state of things as graduating a student in nine months does exist in Louisville,' and therefore regards it as a 'monstrous evil.' The public have a right to the evidence justifying such a belief, before hesitating to condemn the use of epithets in regard to an evil whose existence is simply assumed."

We are not a little surprised, in view of the efforts which Dr. Gaillard has made to defend the short-term system, that its existence as a matter of fact should be questioned by him. When Dr. R. O. Cowling, the editor of the *Louisville Medical News*, exposed the affairs connected with the Louisville Medical College and the Kentucky School of Medicine, we were at first disposed to doubt the accuracy of his statements, for the simple reason that they apparently proved too much. Looking upon the controversy as one of the ordinary methods used for increasing the patronage of their respective schools, we were not disposed to give it the serious consideration which we afterwards found it in reality deserved. Being repeatedly challenged for an opinion in regard to the merits of the case, we were compelled to examine the evidence on both sides, and were forced to believe that all the conditions necessary for the graduation of a student in nine months from the time of the actual commencement of his studies, did really exist in Louisville.

As we have no desire for anything but the truth in the matter, we gladly give the facts upon which our statements in regard to the short-term system are founded. In order to understand the questions at issue in all their different bearings, it is necessary to know that the Louisville Medical College gives a winter course of five months, and the Kentucky School of Medicine gives a summer course of four months. Both of these colleges have virtually the same faculty, have the same dean, and are evidently in direct partnership. It is true they have different charters and different boards of regents, but their interests are common, and, practically speaking, they count as one school, with a session of nine months. Each school is vested with the legal right of granting degrees in medicine; and, as the graduate of one school receives the *ad eundem* degree of the other, it is not very difficult to understand that not only one but two diplomas can be obtained in nine months. In the face of this fact, which is published in their annual announcements, we are given to understand that the schools are entirely different institutions, and the circumstance of having a faculty in common is merely accidental.

We have been led to believe that this faculty favored the short-term system, by the following advertisement:

"Students entering the Kentucky School of Medicine in March of each year, after their winter session is terminated, will enjoy a continuous course of instruction of from nine to ten months, and can graduate at the end of the term. Again, students desiring to study medicine, instead of being compelled to wait until autumn, can enter upon their first course in the Kentucky School of Medicine, and will thus, in the succeeding year, enter medical colleges, not as first-course students, but as candidates for graduation, *gaining thus a year in their professional life.** (*Annual Announcement of Kentucky School of Medicine, Session* 1876.)

The Louisville Medical College, which, we are told, is "an entirely different institution," publishes, in its announcement, the following:

"*Important Notice.*—The attention of medical students is particularly directed to the fact that all who attend their first course of lectures in the Louisville Medical College (which closes in the last week in February) can commence their second course of lec-

* The italics are ours.

tures in the Kentucky School of Medicine in the first week of March of the same year. . . . . *Students adopting this plan will save nearly a year of professional life;** graduating in June, instead of losing the summer and graduating in March of a subsequent year."—(*Announcement Louisville Med. Coll., Session* 1875–76.)

It must be recollected that the combined courses of these colleges represent a period of but nine months; and, as inducement for the student to patronize both schools, and take what is nothing more than a nine months' continuous course, he is told that he will save a whole year in study, and will receive two diplomas besides. In view of these facts, we are led to believe "that such a state of things as graduating a student in nine months does exist in Louisville," and we confess that the explanations which Dr. Gaillard has offered have not shaken us in this belief.

The facts which we have stated are duly published by authority of the faculty, and we labored under the delusion that they were not to be questioned. In connection with this nine-month system, it is proper to state that neither of these schools insist upon any extra period of study for those students who may present themselves for graduation. As far as time is concerned, the candidate is merely required to attend two full courses of lectures at these different (?) institutions. The only exception to this provision is, that four years of reputable practice succeeding a regular course of study will be deemed equivalent to a first course of lectures. The inconsistency of the latter regulation is quite apparent, in connection with the disposition on the part of Dr. Gaillard to ignore any definite time beyond nine months as a necessary factor in the acquirement of a medical education. If time of study is of no account, why insist upon it at all? The only conclusion to be drawn is, that a young man who has faithfully studied medicine under a doctor of medicine, but outside of a medical college, and afterwards practised his profession for four years, has certainly lost so many years of his professional life, less the five months which might have been consumed in attending a first course. We admit this as a good argument in favor of the short-time system and its attendant advantages of double diplomas.

So far, we believe, we have proved that the colleges in question offer facilities for shortening the time of study, and that they do not insist, with the exception named, upon any extra period than that consumed in their two courses. If the faculties (we use the plural as an act of courtesy to the different boards of regents) actually insist upon any more time being consumed in the study of medicine than we have named, we should like to have them say so. The burden of proof in this matter rests with them, not with us. We freely admit that their graduates *may* study one or two years before entering the colleges, but the question for Dr. Gaillard and the faculty to answer is: Do they? If this be a rule to which there has been found no exception, we confess to the belief that such a state of things as graduating a student after merely nine months' course of study, does *not* exist in Louisville. Throughout the whole discussion upon the subject, we have noticed nothing which might be construed into a direct and satisfactory answer of this question; but, on the contrary, a constant attempt is made to bring in side issues, behind which the real truth appears to be hidden. The effort to excuse the short-term system by reference to similar doings in other colleges, is another element in the controversy which does not tend to convince us that our belief is unfounded. The establishment of a bad precedent is not the vindication of a good principle.

If the colleges in question do conscientiously insist upon the full term of study as required by the leading medical institutions of the country, they certainly give a very erroneous impression to the student. The labored endeavor to show that qualification alone should be the test for graduation, creates the unwelcome suspicion in our mind that shortening the time of study is aimed at; and this suspicion gives place to a firm conviction that such is actually the case, by a promise, on the part of the faculty, to save a year of professional life to the student.

Assuming, in the absence of positive proof to the contrary, and in view of an impartial interpretation of the facts already before us, that no extra time of study was required, we glance over the list of graduates of the Kentucky School of Medicine, of the class of '75. (Spring Course.) Of the 42 graduates named, 24 took a continuous course of nine months. This fact shows merely the possibility of students graduating within nine months, as we have no record of their having attended any previous course. The possibility in the case of the 24 is strengthened into a certainty with eight others of the 42. The eight named graduated in June, after having completed their *first* course the previous March in the University of Louisville. We make this statement on the highest possible authority, and are willing to give the names of such graduates to the dean of the faculty of the Kentucky School of Medicine, if he desires them.

As the colleges in question have given us no reason why they should not graduate these gentlemen at the end of nine months' study, we would ask how many of the 42 graduates have actually studied medicine for a longer period. If all of them have fulfilled the usual requirements as to time, then we are ready to confess that we have made a "surprising blunder" in believing it possible to graduate any one in Louisville in nine months.

Dr. Gaillard speaks strongly of qualification as the real test for graduation. What does this qualification amount to? A mere faculty examination is of very little account. It is quite generally acknowledged

* The italics are ours.

that such examinations are wholly untrustworthy. Unless these colleges have a different method of conducting their examinations, and exact a higher standard than any of the schools in New York or Philadelphia, the profession will be very slow to believe that their means of judging of qualifications are any better. In fact our critic virtually admits that they are of no real or practical value by advocating examinations by impartial boards. In view of the impossibility of deciding upon qualifications by an examination of ten or fifteen minutes in each branch, the leading colleges have agreed to insist upon a reasonable time for study, and have fixed this period at three years. The real value of a college course compared with outside study is in proportion to the extra facilities for systematic instruction and clinical demonstration which are offered by the faculty. If a double college course can be considered complete in nine months, either the faculties have discovered some improved plan of teaching, or college instruction strictly so called amounts to very little. We contend that time for study has such a direct bearing upon the amount of qualification, that they cannot be separated. Medicine is a science which must be mastered step by step, by hard and steady work. The longer the period spent in this work, the better the qualification in the end. Substantial growth means time. While we always admire the strength, durability, and magnificence of the oak as an exponent of this principle of growth, we are ever ready to smile in pity at the poor mushroom whose lively exuberance could be expended in no better way than by giving it a double head.

We are not surprised that considerable interest should be manifested in the discussion of the short-term system, by parties not only in, but out of the profession. The editor of the *New York Times*, with a very commendable show of good feeling towards the medical colleges, finds it difficult to believe our statement in regard to the possibility of shortening the time of medical study. In view of his reply to our recent editorials upon the subject we are inclined to give more credit to his heart than to his head. His spirited vindication of the good intentions of the great majority of the medical colleges, not only commends him to the respect and esteem of the medical profession, but to the charitable consideration of his methods of argument. The best that can be said for the latter, is that they are ingenious. In order to prove that we are wrong in supposing that the time of medical study can be shortened, we are informed that the regular terms in the great majority of the schools is three years, and that the *Editor* of the *N. Y. Times* has inquired about "*some* of the schools referred to," and finds "from reliable sources that not one student ever obtained a degree in these institutions, who had not fulfilled the law, so far as completing the three years' course of study and attending the two full courses were concerned." After the statement of these facts, which never were disputed, he staggers us with the following remarkable conclusion:—"It follows, then, that medical colleges which, in the graduating of students are honestly and faithfully guided by the law laid down in their charters, are not only free from corruption, but justified in the exercise of rights which the profession and the public—including the editor of the RECORD—are bound to respect." If the text is the short-term system, our preacher has tacked it to the wrong sermon. Further on, in speaking of the legal requirements of a medical education, he says: "In the face of these facts, the editor of the RECORD charges them with corruption for doing simply what they are obliged to do, and cannot avoid doing if they would." To prove how we can make a charge against regular courses of three years when "the burden of the complaint" is against the "outside schools" that "*shorten the period of study*," will probably give the *Times* another opportunity for the ventilation of its logic. That "some" of the schools comply with the law is not the strongest kind of argument to prove that all must.

We perfectly agree with the editor of the *Times* and with Dr. Gaillard in the belief that this and all other evils connected with imperfect medical education can be effectually remedied by a proper and impartial final examination. The services of these writers in the attempt to prove to us the necessity for State boards of examination are, in view of the principles which we have been advocating for years, somewhat gratuitous, if not presumptuous. We are willing, however, that they should take some credit to themselves for offering apparently original ideas.

Reviews and Notices of Books.

VITAL MOTION AS A MEANS OF PHYSICAL MOTION. By CHARLES BLAND RADCLIFFE, M.D., etc. London: Macmillan & Co. 1876.

THIS volume with a new title contains the facts and theories which for some twenty-five years have been laid before the public by Dr. Radcliffe, concerning the phenomena of contraction, of nerve force, etc. The same facts, minus some additions, were used by the Doctor to explain what epilepsy, spasm, and pain are. It is well known by this time that, unlike most physiologists, Dr. Radcliffe, with the late Drs. West, Dugès, Matteucci, Stannius and a few others, regards contraction as the normal state of the muscular fibre. He contends that the nerves do not bring on contraction of muscles on being stimulated, but that their influence simply counteracts it. When the influence of the nerve is inhibited, *i.e.* taken away, then the muscles, following the law of elasticity, contract. The muscular fibre, according to him, must be considered as Leyden jars, always charged. The charge is brought on by nutrition; the nerves are the instruments which cause the discharge.

Those facts are contradictory to what is now accepted in physiological science, viz., that muscles are

relaxed in their normal state when they are separated from their nerve. It is not easy to reconcile the theory of Dr. Radcliffe with the facts as they are daily observed. The physiologists all have seen that when the spinal cord or a nerve is cut across, the muscular mass which receives nerve supply from the part separated instantly becomes relaxed. This state, according to Dr. Radcliffe, is not one of paralysis, but simply of activity; it is due to the influence of the nerve centres upon the muscular fibres. Accordingly, therefore, in every case of what we are content to call paralysis, section of nerve, of spinal cord, through disease or otherwise, we ought to have contracture. Certainly enough, such a state does sometimes exist; in cases, for instance, of contracture of certain muscles of the face on the paralyzed side after cerebral hemorrhage. But these and other facts are susceptible of another explanation, less paradoxical at any rate; for in those instances, the centres of the nerves directly implicated are not the seats of the disease. They undergo some morbid irritative influence in the shape of sequelæ of the original disease of the hemisphere.

The facts upon which the Doctor grounds his theories are numerous, but they all are more or less known to the student of electro-physiology, so-called, and are only here given with a different interpretation above stated. The author, therefore, is perhaps not justified in stating, in his first chapter, that we are no better than Molière's physician, who was content to know that opium induces sleep because it possesses the "virtus dormitiva." We are content to know that muscles contract because they are endowed with the faculty of contractility. All our aim is to study the phenomena of this fact and discover its laws; we can do no more. Nor has Dr. Radcliffe succeeded in showing us what contractility is. Even if we accepted his theory we would still have to know what elasticity is *in se*, and also the electricity which plays such a rôle in his theory.

The book, like its predecessors, is nicely printed, written in that peculiar happy and suggestive style which Dr. Radcliffe possesses to so high a degree, and well deserves perusal.

Filth-Diseases and their Prevention. By John Simon, M.D., F.R.C.S. Reprinted under the direction of the State Board of Health of Massachusetts. James Campbell. Boston, 1876. Pp. 96.

The above statement indicates at once the nature and the importance of this little book. Written originally as a preface to a volume of reports by the Medical Officer of the Privy Council, England, it is now put forth by the Massachusetts Board of Health, with scarcely an alteration and but one or two additions, and its "careful perusal" strongly urged by the members of this Board over their individual names. The essay has been written for the layman as well as the physician. All technical terms have been translated, and no professional knowledge is required for its comprehension.

Insanity in its Medico-Legal Relations. By A. C. Cowperthwait, A.M., M.D. Philadelphia: J. M. Stoddart & Co., No. 733 Chestnut St. 1876.

In this monograph we have a very clever compilation of the views held by Bucknill, Ray, Maudsley, Hammond, Griesinger and others, concerning insanity. It is, in fact, a well-written lecture, although incomplete, and might with propriety be delivered before a body of medical men, lawyers, or a class of medical students. It is made up largely of quotations from the authors already named. For example, the classifications given are those of Esquirol and Hammond; the pathology is that adopted by Maudsley, and taken from German authorities; the chapter on diagnosis is such as any medical man of moderate ability might write, assisted by Bucknill and Maudsley; the chapter devoted to "criminal responsibility of insane" is made up of extracts from decisions and histories given in cases that have passed through the courts in this country and England, and is accompanied with comments made by Maudsley. The chapter on epileptic insanity is a condensed statement of the symptoms attending the development of this condition, and in it Ray and Maudsley have a prominent position. The chapter on treatment is only a meagre outline of the subject; the question of prognosis is ignored; etiology has received no distinct recognition; and semeiology has received only a forced acknowledgment by way of quotations, while giving definitions.

The rules laid down by the author as a guide to the physician who may be called upon to testify as a medical expert, are very good; and, if carefully observed, will doubtless save many a witness from being wounded by a legal poniard. The intention of the writer was good; for, in obedience to the belief that insanity is a symptom of brain disease, and that the responsibility resting upon the medical profession has consequently increased, he has devoted time and study to the production of this little book, in order that he might assist his brethren in a more thorough study of mental diseases.

Reports of Societies.

MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA.

CENTENNIAL REMINISCENCES OF AMERICAN MEDICINE—THE FIRST MEDICAL COLLEGE—DRS. RUSH AND SHIPPEN—POST-MORTEM FEES—THE NATIONAL MEDICAL LIBRARY—MEDICAL LEGISLATION—HOMŒOPATHY AND THE HARRISBURG HOSPITAL—PRELIMINARY EDUCATION—OFFICERS ELECT.

This body held its meeting in Philadelphia on Wednesday and Thursday, May 31st and June 1st. The officers were as follows: President, Dr. Crawford Irwin, of Blair County; Vice Presidents, Dr. Andrew Zebinger, of Philadelphia, A. H. Stalberstadt, of Schuylkill, R. L. Sibbett, of Cumberland, J. F. Ross, of Clarion; Corresponding Secretary, Dr. Thomas M. Drysdale, of Philadelphia; Treasurer, Dr. Benjamin Lee, of Philadelphia; Permanent Secretary, Dr. W. B. Atkinson, of Philadelphia; Assistant Secretary, Dr. James Tyson, of Philadelphia. After prayer, the Society was welcomed to the city by Dr. Thomas M. Drysdale, Chairman of the Committee of Arrangements.

He alluded to Philadelphia's association with the early history of medicine in this country, to the difficulties which had to be overcome by the earlier students of medicine, and more especially to the struggles of men who, like Dr. Rush and Dr. Shippen, became eminent as physicians in this city before the Revolutionary war. Benjamin Franklin was president of the first medical college ever established in this country, and in 1769 Dr. Rush was elected to the chair of chemistry in that college. The speaker paid a warm tribute to the memory of Dr. Rush, and spoke of his great services to the people of Philadelphia during the rage of yellow fever in the fall of 1793.

He then reviewed the present condition of American medicine as compared to that of a century ago, and noted specially the present advanced condition of the colleges and hospitals of Philadelphia. It is a fact not generally known that in one of the large apartments of Independence Hall was delivered the introductory lecture on anatomy by Dr. William Shippen, in the autumn of 1762. The number of students who attended this course amounted only to twelve. This was the origin of our medical schools.

Reports were presented from the various county societies, and referred as usual to the Committee of Publication. The Corresponding Secretary then made his annual report, referring particularly to the formation of several new county medical societies since the last meeting, and to the action of the censors of the fourth district in a case of appeal. Drs. Whitmarsh of London, J. W. Voorhies and Joseph Parrish of New Jersey, M. Baker of California, Gruwell of Iowa, and W. B. Mowry of Pennsylvania, were elected members by invitation.

On motion of Dr. S. M. Ross, a committee was appointed to indicate the opinion of the State Society upon the subject of increased fees for post-mortem examination ordered by county authorities, a local county law having fixed the fee at the low amount of ten dollars, when thirty dollars would have been a fairer compensation.

The motion gave rise to considerable discussion, and Drs. Ross, E. A. Wood, and Pollock were appointed the committee.

Dr. Horatio C. Wood offered a resolution, which was adopted, appointing a committee of three [Drs. Wood, Dunglison, and Drysdale] to memorialize the U. S. Senators from Pennsylvania, and to request the county societies to institute such measures as may be necessary to urge the publication of the Subject Catalogue of the National Medical Library upon their representatives in Congress.

Dr. R. L. Sibbett then read the report of the Committee on Medical Legislation, stating that efforts had been made to enforce the law against incompetent practitioners, passed April, 1875; that this was not always practicable; that a judge in Franklin county had decided that the law has only a legal subject and a sanction, without a legal action, and is almost inoperative by reason of unskilful draughting; that additional legislation is necessary; the provisions of a new bill being referred to by him, which was intended to repeal and supplement that of last year. The report concluded with the expressed conviction of the committee, that the Legislature are yet unwilling that any standard of qualification should be fixed by law, in regard to those who shall hereafter commence the study of medicine, or that druggists or apothecaries should be restrained or prevented from giving medical and surgical advice.

In the evening session, Dr. Crawford Irwin, President of the Society, delivered the annual address, which was prefaced by a brief review of the progress of the country in population, &c., since the Declaration of Independence. He then discussed the question of "What is the Province of a Physician or Doctor?" considering it as an occupation, as a profession, and as an office.

On Wednesday morning Dr. R. Davis, of Wilkesbarre, read the Address in Obstetrics, referring especially to the subjects of placenta prævia, the employment of the forceps, etc. After electing Drs. Paine and Lawton of Maine, W. Elmer, Sr. of New Jersey, E. J. Kirksey of Georgia, J. Marion Sims of N. Y., and Kohler of Tenn., members by invitation, Dr. D. Hayes Agnew of Philadelphia read the Address in Surgery, a valuable practical paper on the subject.

On motion of Dr. Rahter of Harrisburg, the State Society listened to a statement of difficulties arising in the Dauphin Co. Medical Society, in connection with the resignation of the medical staff of the Harrisburg Hospital in 1873, which had occurred in consequence of the passage by the managers of the following resolution:

"*Whereas*, It has been stated that if homœopathic medicines be procured, attendance will be furnished gratuitously by a homœopathic physician: therefore,

"*Resolved*, That a case of homœopathic medicines be procured, at a cost not exceeding one hundred dollars, so that if any patients wish to be treated under that system it may be done by a physician of that school."

The Dauphin Co. Med. Society endorsed the course of the medical staff. The State Society passed resolutions sustaining this action; immediately after which Dr. Langfitt of Allegheny introduced a resolution in regard to the graduation of homœopathic students in regular medical colleges; but as this seemed to be a reflection on the course of those institutions, without specific facts being given, the resolutions were tabled. A resolution offered by Dr. Pollock, of Allegheny Co., worded as follows:—"No member of any County Medical Society shall admit into his office a student of medicine, until he presents a certificate from the Examining Committee, testifying that he has been duly examined, and has a good English education, and sufficient knowledge of Latin and Greek to enable him to pursue his studies with advantage,"—was referred to a committee of five, to report at the next meeting of the Society. Drs. Pollock, Stewart, Pursell, Ross, of Altoona; and Miller, of Huntingdon.

The Committee on Nominations then made the following report:—

President—Dr. R. B. Mowry.

Vice Presidents—Drs. George W. Reily, Amos Scip, Thomas Lyon, D. P. Miller.

Corresponding Secretary—Dr. Thomas M. Drysdale.

Permanent Secretary—Dr. Wm. B. Atkinson.

Treasurer—Benjamin Lee.

Recording Secretary—Dr. H. L. Orth.

Committee on Publication—Dr. Wm. B. Atkinson, J. G. Stetler, Benjamin Lee, T. M. Drysdale, James Tyson, Albert Fricke, H. L. Orth.

Delegates to the American Medical Association—Dr. F. C. Harrison, Union; Dr. M. S. Welsh, Vernango; Dr. G. B. Mitchell, Mifflin; Dr. A. M. Neyman, Butler; Dr. Wm. Corson, Montgomery; Dr. I. N. Pierson, Adams; Dr. Wm. Heisen, Allegheny; Dr. P. L. Reichard, Lehigh; Dr. James Coblentz, Berks; Dr. James Eby, Perry; Dr. I. N. Snively, Franklin; Dr. Wm. Anderson, Indiana; Dr. C. A. Rahter, Dauphin; Dr. L. Turnbull, Philadelphia; Dr. R. Davis, Luzerne; Dr. J. S. Crawford, Lycoming; Dr. B. Leaman, Lancaster; Dr. John G. Stetler, Philadelphia; Dr. W. I. Ainey, Susquehanna; Dr. R. J. Levis, Philadelphia; Dr. Joseph McElroy, Washington; Dr. I. I. Morrow, Mercer; Dr. W. B. Ulrich, Delaware; Dr. W. M. Reber, Columbia; Dr. Traill Green, Northampton.

Place of meeting, Harrisburg. Time of meeting, second Wednesday, June, 1877.

Delegates were then appointed to the New Jersey Medical Society, New York State Society, Ohio State Medical Society, Delaware State Medical Society, West Virginia State Medical Society, Medical and Chirurgical Faculty of Maryland, Connecticut Medical Society, and International Medical Congress.

Any vacancies in the list of delegates to the Inter-

national Medical Congress to be filled by the President and Secretary.

On motion of Dr. Cohen, the report was adopted, with the exception of the delegation to the International Congress from Philadelphia.

Drs. D. S. Booth, of Illinois, D. E. Byrd, Arkansas, B. S. Woodworth, Indiana, were made members by invitation.

Dr. H. Corson offered a resolution to publish a report made some years ago on infanticide by Dr. A. Nebinger, and not then published.

The Committee of Publication stated that if this were published, it would establish a bad precedent, as it had already been published by another body. The resolution to publish it in the next volume of *Transactions* was agreed to.

Dr. Curwen, of the Committee on Insane Criminals, reported that they had failed to obtain the necessary legislation; also reported on the subject of the Southeastern Insane Asylum and the Insane Poor, and the memorial was ordered to be published with the *Transactions*. Dr. Curwen was requested to prepare a further statement, to be issued at once, and also published in the *Transactions*.

Dr. John L. Atlee, of Lancaster, offered resolution in regard to death of Dr. Edward Wallace. On motion of Dr. Deysdale, the salary of the Permanent Secretary was fixed at three hundred dollars. Reports were then presented from the Treasurer, and the Committee on Publication, the Committee on Anæsthetics, etc.

The Committee on Post-mortem Fees then recommended the repeal of all special legislation upon fees for autopsies. Also, that the fees established by county medical societies be the standard of charges for professional services; and that a committee be appointed, of one physician from each censorial district of this commonwealth, who shall procure the proper legislation (if possible) for the purpose.

After giving notice of amendments to the By-Laws and Constitution, the usual votes of thanks and a short address by Dr. Mowry, President-elect, the Society adjourned to meet at Harrisburg, June, 1877.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, May 19th, 1876.

DRS. FOSTER AND STURGIS, VICE-PRESIDENTS, IN THE CHAIR.

THE TOPICAL USE OF THIN BIBULOUS PAPER IN AFFECTIONS OF THE SKIN AND MUCOUS MEMBRANES.

DR. G. H. FOX read a brief paper which contained a description of the material and an account of the uses to which he had put thin bibulous paper as suggested in the above title. Two varieties of the paper were described: the French, or that used by dentists for absorbing the saliva while operating about the mouth; and the Japanese. The former was made of vegetable fibre containing an admixture of wool; could be easily reduced to a pulp by moisture, and was capable of absorbing at least five times its weight of water. Its powers of absorption, perhaps, were no greater than those of good lint, but it absorbed far more rapidly. The Japanese paper, when moistened, did not reduce to a pulp, but could be rolled into cylinders and then would resist a large amount of traction. It could, therefore, be rolled and made to enter sinuses, the urethra, etc., if desirable, and was sufficiently strong to permit its easy removal. Dr. Fox regarded the paper, more especially the French variety, as a cheap and convenient substitute for lint, cotton, or absorbent powders, and that it could be easily used in a goodly number of cases. It might be used for cleaning bleeding surfaces, and would make an excellent substitute for sponges, which are so liable to convey the germs of disease from one person to another. In the treatment of the exuding forms of skin disease it was not regarded as of sufficient value to be worthy of recommendation. Its greatest value had been seen in the treatment of venereal disease, particularly genital sores. It had, however, served a very good purpose in the treatment of eczema of the breast occurring while nursing. The breast was simply covered with the paper, and frequently changed. When rolled into pellets of varying size, it formed a most admirable means for bringing fluid caustic substances in exact contact with the surface to be cauterized, and that surface only; for example, the application of nitric acid to the surface of a chancroid. When the pellet had been used it could be thrown away, and transmission of the disease by means of instruments, etc., was readily avoided. It was said that the best dressing for venereal sores was that which kept the discharge most constantly absorbed. Lint and cotton might do that, but they were difficult to remove, and a powder would form a crust that would be objectionable. The spongy paper readily absorbed the discharge, and, if frequently renewed, would keep the sore and surrounding parts clean without washing. As compared with lint, the paper was regarded as equal in every respect, and in many respects superior, because it absorbed a larger quantity and more readily, was easily removed, and cost only about one-fifth as much. The thin bibulous paper might be medicated, and specimens were exhibited medicated with fifty per cent. solution of carbolic acid; with persulphate and perchloride of iron, when it might be substituted for styptic cotton; with fifteen per cent. ethereal solution of iodoform, not specially recommended however; with thymol, calingula, etc., etc.

The paper was discussed by Drs. O'Sullivan, Post, Farnham, Robertson, Piffard, Bulkley, Taylor, Pooley, Sturgis, and others.

The dermatologists believed that the paper might be serviceable in the treatment of zoster, where a scab was desired. The oculists thought it might be used with advantage for cleansing the surface in suppurative forms of eye disease. The surgeons regarded it as a valuable means for controlling epistaxis and many of the milder hemorrhages.

It was commended as a substitute for and an accessory to the napkin ordinarily worn for the purpose of absorbing the menstrual discharge, and its non-irritant properties recommended it as a substitute for the handkerchief in the more or less constant attention demanded by an ordinary nasal catarrh.

A vote of thanks was tendered to Dr. Fox, and the Association adjourned.

M. VLEMINCKX. — Some details of the demise of Mr. Vleminckx make it probable that embolism was the cause of his death. He had suffered for a long time from some cardiac trouble, and it is thought that some acute disease of the heart, perhaps an ulcerative endocarditis, had set in in consequence of the disturbed nutrition consequent on the disease immediately preceding it. There were circumscribed foci in the lungs.

Correspondence.

MEDICAL CENTENNIAL AFFAIRS.

(From our Special Correspondent.)

GOVERMENTAL CONTRIBUTIONS — HOSPITAL CARS—THE U. S. HOSPITAL STEAMBOAT—AMPUTATING INSTRUMENTS OF THE REVOLUTION MICRO-PHOTOGRAPHS RARE BOOKS—LETTERS—AMBULANCES—A BLOODY PICTURE.

THE models of hospital cars are on the scale of an inch to the foot, and are made of hard wood or brass, with the rools removable to permit the inspection of the interior. Assistant Surgeon G. A. Otis, U.S.A., has recently described the various modes of transportation adopted in the army during the war, in a "Report on a Plan for transporting wounded Soldiers by Railway in Time of War," etc. Washington, S. G. O., 1875. The model exhibited represent: 1. the surgeon's car of a hospital train of the Army of the Cumberland. 2. The kitchen car of a hospital train of the same Army. 3. The form of car found most satisfactory for the transportation of sick and wounded in the same army. 4. A hospital car of the Army of the Potomac. 5. A freight car fitted up with litters for transporting sick and wounded.

The latter model is intended to represent the plan devised by Grund, a German master-machinist, and adjudged the most suitable for freight cars by the Prussian Commission of 1868. It consists "in supporting three ordinary field stretchers in the front, and three in the rear part of the freight car, twenty feet long, by means of transverse wooden bars, resting on semi-elliptical plate springs. The springs are spiked at one end to the flooring, to keep the bars stationary, while at the other end are rollers, to permit the yielding of the springs. The latter are surmounted by U pieces, or clips to receive the cross-bars. Four cross-beams and eight springs constitute the outfit requisite for the reception of six litters. Asst. Surg. Otis has recommended that, in any future war, the Quartermaster's Department of our army should be authorized to keep on hand a supply of these semi-elliptical springs. Trains going to the front with provisions, forage, or ammunition, should then each carry, suspended under the roof, a sufficient number of these springs, with the spikes required, to enable the car on its return, instead of going back empty, to carry comfortably, on beds improvised by means of the ordinary field stretchers, a number of sick or wounded corresponding to its size. He also suggests that these springs might be utilized in connection with field stretchers for the comfortable conveyance of the wounded in ordinary army wagons.

The model of the U. S. Hospital Steamboat D. A. January, recalls vivid reminiscences of her great usefulness during the war, 1861-5, upon the Western waters. She carried altogether 23,738 patients.

Among other articles on exhibition in this building are an amputating case used during the war of 1812; some amputating instruments employed by Dr. Benjamin Treadwell, on board of a man-of-war during the Revolution, &c. The latter forcibly illustrates the improvement in surgical appliances since that day, the amputating knives being sickle-shaped, and the spring lancet having a very antiquated and bulky appearance. Each window of the hospital is embellished with beautiful transparent micro-photographs, by Dr. Woodward, about sixty in all, while specimens of his ability and industry in this direction abound in numerous portfolios. The walls of the wards also contain similar illustrations, and Dr. Yarrow is also preparing a series of microscopic objects for examination and exhibition hereafter. We have no hesitation in expressing our belief that the U. S. Government, and notably our distinguished Surgeon-General, have done more for the encouragement of this cultivated taste in the Army Medical Staff than any other department or officials in any other country. The illustration of the apparent identity of shape of the blood-corpuscles of man and the dog, when magnified 4,350 diameters, is very suggestive, and particularly interesting to the medical profession.

Portfolios of photographs, of uniform size, of title or other pages, of rare books in the National Medical Library, at Washington, are also exhibited here. From a statement accompanying them, prepared by Dr. J. S. Billings, to whom the credit of collecting this great national treasury of medical literature is mainly due, we learn that the object is to show what has been accomplished in the attempt made by this department to form a collection of medical literature, which should meet the demands of the physicians of the United States. Many of the books are yellow with age, and all the yellow spots or stains appear in the photographs as dark or black spots. The photographs are arranged in three series: 1st. Those taken from early printed books, the so-called "Incunabula," and from other works, which are rare, at least in this country; 2d. Those relating to surgery, and especially to military surgery; and 3d. Rare books and pamphlets connected with American medical history. We shall hereafter have occasion to refer again to this interesting feature. There is a photograph of a specimen page of the oldest manuscript in the library, dated 1349, the "Lilium Medicum" of Bernard de Gordon; and of pages of the "Libellus de Egritudinibus infantum" of Paul Bagellardus, 1472, the first printed monograph on diseases of children: and of Benevenutus Grassus, Ferrara, 1475, the first printed monograph on diseases of the eye.

Of litters, ambulances, &c., there are numerous illustrations and specimens, both within the building and on its exterior, including Dr. McElderry's litter, allowing the patient to lie lengthwise on the horse, as employed in the Modoc campaign; the American field knapsack for the surgeon, much less roughly made than the Russian one which is alongside of it; the Tompkins' wheel litter; the new army medical pannier, which is very complete in its outfit, and superseding, by its greater lightness, the old form, consisting of two tin boxes; the ambulances devised by Hagner, Rucker, Ekin, and others, and the experimental ambulance, in accordance with the suggestions of a board assembled for that purpose; the convenient U. S. medicine wagon of J. Perot & Co.; that of Autenreith, etc. Drs. Otis and Huntington, U.S.A., have devised a wagon for the conveyance of U. S. medical stores, for rapidly marching field parties, which require only one horse. There is also in the second story of this model hospital an exhibition of the artificial limbs of various manufacturers, which are supplied through the Surgeon-General's office.

There is on exhibition on the first floor a large portrait of Prof. Gross in the act of performing an amputation in the presence of his class, painted by Mr. Thos. Eakins, of this city. The picture has much merit, and the likeness is excellent; but the coloring is not pleasant, and the subject is so repulsive, the Professor's unnecessarily bloody hand being the conspicuous feature of the scene, that we are not surprised that, for this latter cause alone, it was refused a place in the Art Gallery by the Committee of Selection, to find a more appropriate niche in the Army Hospital. R. J. D.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from May 28th to June 3d, 1876.

SMITH, J. R., Surgeon. To represent the Army Medical Department at the annual meeting of the American Medical Association at Philadelphia, on June 5th. S. O. 103, A. G. O, May 26th, 1876.

WOODWARD, J. J., Asst. Surgeon. To represent the Army Medical Department at the annual meeting of the American Medical Association at Philadelphia, on June 5th. S. O. 103, c. s., A. G. O.

BILLINGS, J. S., Asst. Surgeon. To represent the Army Medical Department at the annual meeting of the American Medical Association at Philadelphia, on June 5th. S. O. 103, c. s., A. G. O.

WILLIAMS, J. W., Asst. Surgeon. In addition to his duties as Chief Medical Officer, to take charge of the Battery and Captain Baker's company, 6th Infantry. S. F. O., Headquarters, Department of Dakota (in the field), May 14th, 1876.

HUBBARD, V. B., Asst. Surgeon. To accompany battalions of 4th Artillery to and from Sitka, Alaska, and upon completion of this duty, to rejoin his station—Alcatraz Island, Cal. S. O. 66, Division of the Pacific, May 23d, 1876.

BROOKE, JNO., Asst. Surgeon. Assigned to duty at Columbia, S. C. S. O. 73, c. s., Department of the South.

KINSMAN, J. H., Asst. Surgeon. Granted leave of absence for one month. S. O. 70, Department of Dakota, May 24th, 1876.

BAILY, J. C., Surgeon. Assigned to duty as Post Surgeon at Newport Barracks, Ky. S. O. 73, Department of the South, May 29th, 1876.

TAYLOR, M. K., Asst. Surgeon. In addition to his duties as Post Surgeon, to perform those of attending Surgeon at these Headquarters. S. O. 93, Department of Texas, May 24th, 1876.

WHITE, R. H., Asst. Surgeon. Assigned to duty as Post Surgeon at Ringgold Barracks, Texas. S. O. 93, c. s., Department of Texas.

ELBREY, F. W., Asst. Surgeon. Assigned to duty as Post Surgeon at McPherson Barracks, Atlanta, Ga. S. O. 73, c. s., Department of the South.

JACKSON, D., Asst. Surgeon. Granted leave of absence for four months, with permission to go beyond sea. S. O. 103, A. G. O., May 26th, 1876.

FINLEY J. A., Asst. Surgeon. Leave of absence extended one month. S. O. 51, Military Division of the Missouri, May 31st, 1876.

REED W., Asst. Surgeon. Assigned to duty at Camp Lowell, O. T. S. O. 59, Department of Arizona, May 9th, 1876.

SPENCER W. G., Asst. Surgeon. Assigned to duty at Raleigh, N. C. S. O. 73, c. s., Department of the South.

Medical Items and News.

TRAUBE'S SUCCESSOR.—Among the candidates who are named to succeed Traube at the Charité in Berlin, are Professor Friedreich of Heidelberg, and Leyden of Strasburg. Professor Schiff, of Florence, is to be professor of Physiology at the Geneva School, in place of Brown-Séquard, who has declined. Vaucher is to have the chair of Obstetrics; Colnstein, of Gynecology; D'Espine of Internal Medicine; Prévost, of Materia Medica; and Gosse, of Medical Jurisprudence.

DECREES OF THE COURT OF APPEALS.—The French Court of Appeals delivered the following decision on March 31st, 1874: "A physician is guilty of swindling, who, by means of lying advertisements, vaunts his method of treating diseases, and publishes certificates which he has obtained fraudulently, and which certify falsely to cures of diseases declared incurable by other physicians."

Again, by a decision of the 25th of last March, an apothecary who, without the prescription of a physician, where the case was not of urgent necessity, sells a medicinal preparation, composed of several different ingredients, renders himself liable to prosecution for the illegal practice of medicine.—*Bordeaux Médical.*

MANHATTAN EYE AND EAR HOSPITAL.—There has been added a new department to the services of the Manhattan Eye and Ear Hospital, namely, that for nervous diseases. Prof. E. C. Seguin has been elected to fill it. This important step in the development of the hospital will tend to bring the specialties of the eye, ear, and throat, and diseases of the nervous system, into closer relations in the clinics of the institution, and insure a careful scrutiny of all cases and the greatest scientific accuracy in the investigation of those which seem to be marked by some peculiar neurosis.

CONNECTICUT MEDICAL SOCIETY.—At the annual meeting of this medical society, held in New Haven, May 24th and 25th, Dr. A. W. Barrows, of Hartford, was elected President; Dr. R. Hubbard, of Bridgeport, Vice-President; Dr. F. D. Edgerton, of Middletown, Treasurer; Dr. C. W. Chamberlain, of Hartford, Secretary.

ROCKLAND CO. MEDICAL SOCIETY.—At the annual meeting of the Medical Society of Rockland County, N. Y., held May 30th, 1876, the following gentlemen were elected officers for the ensuing year; viz.—President, Dr. J. J. Stephens, Tappantown; Vice-President, Dr. B. H. House, Rockland Lake; Secretary, Dr. William Govan, Stony Point; Treasurer and Librarian, Dr. Jacob Wigton, Spring Valley. *Censors*, Drs. J. O. Polhamus, J. Wigton, and J. Waring; Delegate to the State Medical Society, J. O. Polhamus.

UNIVERSITY OF MICHIGAN, AND THE RECOGNITION OF LECTURE TICKETS.—We are asked to make the announcement that official communications have been received during the present week by the Faculty of the old school of the University of Michigan, from Bellevue Hospital Medical College, and the College of Physicians and Surgeons, of N. Y. and the Long Island Hospital College of Brooklyn, announcing that they will accept the tickets of the University of Michigan, and recognize its graduates as heretofore.

MEDICO-LEGAL SOCIETY.—This society held its last meeting of the season on the evening of June 7th.

AIR-TIGHT VACCINE CASE.—The Case Record Company of Cincinnati have manufactured what appears to be a very useful vaccine case. It is so constructed that it is capable of excluding light, heat, and air. It consists of a tube of hard rubber open at each end and provided with lids which screw down closely, and by means of india-rubber packing render the tube absolutely air-tight. Near the lower end of the tube is a perforated diaphragm dividing the tube in two compartments, in one of which (the lower) is a piece of freshly burnt lime in cotton. The upper compartment is for the vaccine crusts, quills or ivory points. It is claimed that by this means crusts and quills can be kept for months in a perfect state of preservation, and be sent thousands of miles by land or sea.

ENGLISH DEBATE ON SYPHILIS.—We shall continue our review of this subject in our next issue.

Reports of Societies.

AMERICAN MEDICAL ASSOCIATION.

TWENTY-SEVENTH ANNUAL MEETING.

PHILADELPHIA, June 6, 7, 8, 1875.

TUESDAY, JUNE 6—FIRST DAY.

THE Association met at Horticultural Hall, Philadelphia, Tuesday, June 7, and was called to order at eleven A.M. by Dr. Wm. Pepper, Chairman of the Committee of Arrangements. A prayer was then offered by the Rev. Dr. Beadle, after which Dr. W. K. Bowling, of Kentucky, introduced the President-elect, Dr. J. Marion Sims, of New York. The latter was supported by the following officers of the Association: Vice-Presidents, Drs. Samuel Lilly, of New Jersey; Ninian Pinckney, U. S. N., and S. D. Scelye, of Alabama; Dr. W. B. Atkinson, Secretary, and Dr. R. J. Dunglison, Assistant Secretary.

DR. PEPPER, on behalf of the Committee of Arrangements, delivered an address of welcome to the delegates, in which he referred to the attractive medical features of Philadelphia, its sanitary resources, its medical schools and organizations, concluding with a resolution inviting the following gentlemen to seats upon the platform: Surgeon-General William Roth, 12th Corps (Royal Saxon) German Army, and staff, viz., Assistant Surgeon Hans Heymann, 12th Corps (Royal Saxon) German Army, and Dr. Max Brille, Dresden, Germany. Members by invitation: Dr. Wywoodzoff, of St. Petersburg, of the Russian Commission; Le Docteur Gaffray, representative of the Paris Press to the Exposition; and Surgeon-General J. K. Barnes, U. S Army.

The reading of the roll of registered delegates was dispensed with, after some discussion, when the Secretary read a letter from Dr. William O. Baldwin, late President of the Association, regretting his inability to be present.

ADDRESS OF THE PRESIDENT—HISTORICAL REMINISCENCES—MEDICAL EDUCATION—THE CODE OF ETHICS AND MEDICAL PATENTS—STATE MEDICINE—THE PREVENTION OF PROSTITUTION.

The President, DR. J. MARION SIMS, of New York, then read his inaugural address.

After congratulating the delegates on the privilege of meeting in Philadelphia, in the Centennial year, and joining in the Centennial celebrations, the speaker said that they were standing on hallowed ground,—hallowed because the birth-place of a nation. A century was a brief period in the history of nations, but in that time we had increased from 3,000,000 to more than 40,000 000 of people, and had made our mark in science and letters. Although the organization of the Association was conceived in New York, its actual birth-place was in Philadelphia, twenty nine years ago, its first scientific meeting being in Baltimore in 1848. Formed mainly for the purpose of improving the medical educational interests of America, it had exerted some influence in the direction intended. Although it had failed to meet the ardent expectations of its projectors, it had nevertheless vindicated its claims to the rank of the representative medical body of the country. It was not, however, due to any want of disposition to effect reforms in medical education that not more was effected. In fact it had engaged the attention of the Association at every meeting since its formation, and volumes had been written on the subject. Dr. William O. Baldwin, of Alabama, President of the Association in 1869, in his inaugural address had ably set forth the defects of the present method of medical education, and had proposed as a remedy the establishment of a great national university, under Government auspices, at the capital. If the large sum necessary for such a university could be obtained from the Government, its graduates would doubtless rank with those of the best foreign universities. He had felt greatly interested in Dr. Baldwin's scheme, and had been anxious to see it carried out. To this end he had consulted some of the wisest and ablest educationists in the country, and had also taken counsel with some of the great political leaders of the day; but he regretted to say that he had found so little sympathy with the project, that he had been unwillingly forced to let the subject rest in abeyance for the time being. The Harvard method, with a salaried Faculty wholly independent of fees from students, was in his opinion the only plan by which a medical degree of any real value could be gained. Five or six hundred thousand dollars given to the Medical Department of the University of New York, or to either of the schools of New York or Philadelphia, properly invested, would yield an annual income sufficient to endow the professorships in said school. This would make the professors independent, and they would not be compelled to graduate young men merely for the sake of the numbers graduated, irrespective of qualification. The University of Virginia was, perhaps, the best training-school in the country, but unfortunately its want of hospital advantages crippled its practical teaching.

In speaking of the practical application of the provisions of the Code of Ethics, he doubted if the latter were wholly up to the present requirements. For instance, he questioned the wisdom of preventing medical patents. He asked why any man should be debarred from taking out a patent for a useful invention, merely because he happened to be a physician. Did the profession at large, or did the public, derive any benefit by the robbery of the inventor? None whatever. He was simply compelled to give his invention, his time and labor, to enrich the instrument-maker.

Again, the Code of Ethics was violated every day, either wilfully or ignorantly, not only by the rank and file, but by men high in the profession; men who were considered leaders, advanced thinkers and workers. How many of those present prescribed chlorodyne, McMunn's elixir of opium, Henry's calcined magnesia, and the Tolu anodyne? Yet they were secret remedies. The prescription of all such remedies was a flagrant violation of their Code of Ethics. But they seemed to condone the act, because usage and interest justified it.

The subject of State medicine was next touched upon as one of the greatest importance, and he remarked that the address of Dr. Bowditch, foreshadowing the practicability of inaugurating a movement of the establishment of a National Health Bureau, commended itself to the attention of the members so far as the initiatory formation of State Boards of health was concerned.

In conclusion, he alluded to the vexed question of legislation against syphilis and prostitution, condemning the legalization of the latter, and advising all the matters connected with the spread of the disease to be handed over to the Health Boards.

MISCELLANEOUS BUSINESS.

After a vote of thanks had been tendered for the

address, Dr. Pepper then announced that the Medical Building, directly behind the Judges' Hall, in the Landsdowne Ravine, would be used as a place of rendezvous for physicians visiting the Centennial.

The times and places of meeting of the sections were next announced.

Dr. Toner, of Washington, moved that ten o'clock on Wednesday be set apart for the reading of the Address on Surgery.

Dr. Toner called upon the Secretary to read the list of the reports to be presented, which was done. A motion was then made to adjourn until three o'clock, and at the same time an effort was made to change the place of meeting to some other hall, but without success. The meeting then adjourned to nine o'clock on Wednesday.

EVENING ENTERTAINMENT.

During the evening the members accepted the invitation of the Committee of Arrangements to a grand promenade concert and supper at Horticultural Hall. The attendance was large and the occasion enjoyable to all.

WEDNESDAY, JUNE 7—SECOND DAY.

COMMITTEE ON NOMINATIONS.

The meeting was called to order by the president pursuant to previous adjournment.

The following Committee on Nominations was appointed:

Alabama, L. B. Sulze; Arkansas, George T. Hood; California, W. Baker; Connecticut, A. Woodward; Delaware, W. Marshall; District of Columbia, J. Elliott; Florida, G. W. Betton; Georgia, J. P. Logan; Indiana, L. Humphrey; Illinois, T. D. Washburne; Iowa, W. Watson; Kentucky, H. M. Skillman; Kansas, C. V. Mattson; Michigan, A. S. Heaton; Massachusetts, A. B. Hall; Minnesota, E. C. Cross; Maryland, Thomas F. Latimer; Maine, A. B. Snow; Missouri, John T. Hodgen; Mississippi, William Campton; New Hampshire, J. L. Swett; New York, N. C. Husted; New Jersey, S. Lilly; North Carolina, E. Grissom; Ohio, W. J. Scott; Pennsylvania, Traill Green; Rhode Island, L. C. Butler; South Carolina, James McIntosh; Tennessee, John H. Callender; Texas, E. Darnell; Vermont, W. D. Holton; Virginia, J. S. Wellford; West Virginia, J. C. Hupp; Wisconsin, H. P. Strong; U. S. Army, J. R. Smith; U. S. Navy, A. L. Gihon.

The Judicial Council reported that they had decided that the delegates from the Arkansas State Medical Society were entitled to recognition.

NATURAL PURIFIERS—WATER SUPPLY AND SEWERAGE.

Dr. R. C. Kedzie, of Lansing, Mich., read a paper with the above title. He contended that the conditions of water and air were the main if not the only ones upon which the discussion of his subject rested, but the purifier *par excellence* was oxygen.

In conclusion the gentleman offered the following resolutions, which were adopted:

Resolved, That it is the first duty of States and municipalities—first in importance, and first in the order of time—to make a sanitary survey of the water supply to preserve it against all unnecessary and avoidable contamination.

Resolved, That no municipality should introduce a water system without at the same time providing a corresponding and extensive sewer system.

Doctors Wilhelm Hiorth and H. G. Holst, Medical Directors, Christiania, Sweden, were made members by invitation.

CENTENNIAL SURGERY.

Dr. A. Garcelon, of Maine, read an address on the Progress of Surgery during the past century. He remarked that in 1776 this country was so sparsely settled, and only two cities having a population of over 20,000 inhabitants, that but few men of high scientific attainments could find employment for their skill. Under such circumstances ignorance and empiricism prevailed. A half century later we had made but little progress. The establishment of medical schools and hospitals, and the publication of medical journals, followed the commencement of the present century, and the war of 1812 imparted to them an additional stimulus. Since 1800 the number of these had increased with great rapidity, and the schools now numbered not less than one hundred, besides a large number of preparatory schools. Although many of the graduates of these institutions ranked as the peers of those of any age or country, and as practical operative surgeons they have no known superiors, it was quite evident that the present system of college instruction, if continued, would effectually undermine such a reputation. The lax laws in reference to graduation were next alluded to, and a greater restriction of graduating privileges was earnestly urged.

UNIFORMITY OF MEDICAL OBSERVATION AND NATIONAL MEDICAL CONGRESS.

Dr. Edward Seguin, N. Y., made the following report:

For several years, the American Medical Association has given its support to a measure of great interest for those who have at heart the advance of physic, namely, the establishment of uniform means of observation, and of medical records, for the physicians of all countries. This action of the American Medical Association has been expressed by the adoption of successive resolutions, and by the sending of delegates charged with the mission of advocating this reform:—in 1873, to the British Medical Association, meeting in London; and to the French Association for the Advancement of the Sciences, meeting at Lyons. In 1874, to the British Medical Association, meeting at Norwich; and to the French Association for the Advancement of Sciences, meeting at Lille. In 1875, to the International Medical Congress, meeting at Bruxelles. In 1876 (next September), the same congress will meet in this very place; and now the American Medical Association is called to decide what position it will assume in this matter.

Will it recede from its former position, and leave the task to second-hand promoters, or will it continue its initiative before the International Council? This is not only a question of pride for the Association; it is also one of justice due to the American physicians at large. If the constitution and by-laws of this Association prescribe an annual transfer of its meetings from one part to another of this vast country, it is to give us opportunities to study and express the wants of the whole profession. Of these wants, none has been found more deeply felt than the one of partaking, as givers and receivers, in the discoveries of our art. But this want is not ours alone, it is universal; and the American Medical Association will deserve the thanks of all for having planned, and carried into execution, the most important instrument of internationalization of the medical progress.

Therefore the Association resolves to charge its delegates of former years to continue to advocate the uniformity of means of observation before the various

medical societies, and particularly at the next International Medical Congress, and report next year what success they will have met.

Doctors Seguin and Bowditch were appointed additional delegates to the International Congress.

REPORTS OF TREASURER, PUBLICATION AND LIBRARY COMMITTEES.

The report of the Treasurer showed that there was an unexpended balance of $4,577.07 in his hand to date.

The report of the Committee of Publication stated that of the volume of the *Transactions* for 1875, nine hundred and fifty copies were printed, at an aggregate expense of $2,000. Of these, 883 copies have been distributed to members, 28 to medical journals and societies, leaving 39 on hand.

The report of the Librarian stated that during the past year there had been added to the library 124 distinct titles, exclusive of yearly volumes of transactions of societies, reports of hospitals and boards of health, and volumes of medical journals, where these have been previously catalogued as distinct titles. This addition makes the library consist at present of 630 distinct titles, which comprehend 1,514 volumes, including pamphlets.

The report of DR. C. C. HOWARD, delegate to the Brussels International Medical Congress, held in September last, was presented, and referred to the Committee on Publication.

A sketch, prepared by PROF. HAILES, of the life of Dr. Armsby, of Albany, N. Y., was, on motion, referred to the Committee on Publication.

The meeting then adjourned until 9.30 A.M. on Thursday.

The afternoon was occupied in the meeting of the different sections.

In the evening a lecture was delivered by PROF. GEORGE F. BARKER, M.D., of the University of Pennsylvania, on the "World of the Seen and the Unseen." After explaining some of the phenomena connected with optical delusions, and showing how scientific investigation was passing into a field where the senses were absolutely insufficient to search, the lecturer gave a number of illustrations, showing the methods of investigation into matters beyond the reach of the senses, as sound and light, many of which were very beautiful and elicited great applause.

THURSDAY, JUNE 8—THIRD DAY.

Horticultural Hall having proved inadequate to the requirements of the meeting, Kiralfy's Alhambra Palace was selected for this morning's session. The meeting for this day was accordingly called at that place, and commenced, pursuant to previous adjournment, at 9.30 A.M., President Dr. J. Marion Sims in the Chair.

REGISTRATION AND MEMBERSHIP.

On motion, the resolution of the day before, that all persons whose names are at present on the roll shall be voted members, was reconsidered, and it was agreed, after some discussion, that the roll of members, amounting to some 730 names, be called. In accordance with this desire the Secretary began calling the roll, and continued to do so until ten o'clock, when the hour arrived for the reading of the

ADDRESS ON OBSTETRICS, by DR. S. C. BUSEY, of Washington, D. C.

On the conclusion of the reading, DR. J. L. ATLEE moved that the address be referred to the Committee on Publication, for publication, and discussed at the next meeting of the section on Obstetrics. Adopted.

The effort was then again made to do away with the reading of the roll, but unsuccessfully. The motion occasioned considerable discussion.

MICHIGAN STATE SOCIETY AND DELEGATESHIP.

On the reading of the roll, at the name of a delegate from the State Society of Michigan, the delegate was objected to, as coming from a society against which charges were pending. At this juncture the report of the Judicial Council, signed by Dr. Benham, Chairman, recommending that the delegates from Michigan State Society be received, was presented. The report was applauded, and the reading of the roll was continued.

MEMBERS IN ABSENTIO.

At the name of Dr. Thomas J. Griffiths, of Louisville, an objection was made that he was not or had not been present, and the Secretary was requested to strike his name from the roll if the objection should be found, on inquiry, to be well founded.

FEMALE REPRESENTATION.

On the reading of the name of Sarah Hackett Stevens, representing the Illinois State Society, DR. BRODIE, of Detroit, moved that that and all such names be referred to the Judicial Council. A motion that this resolution be laid upon the table was carried by a large vote, amid considerable applause.

The President asked if the vote was intended to recognize her right to a seat, when loud cries of "Yes," and cheers, emphatically answered the question.

DR. TONER, of Washington, moved that the roll as read be confirmed, with the exception of the objections taken.

THE QUESTION OF PATENTS IN MEDICINE.

A resolution providing that it was not derogatory in any physician to take out a patent for a surgical instrument of any kind, was referred to the Judicial Council.

THE MCDOWELL MEMORIAL FUND.

DR. KELLER, of Kentucky, on behalf of the trustees of the fund for amonument to the late Dr. McDowell, of Kentucky, reported a recommendation for an increase of one dollar each year in membership dues, the amount thus raised to go to said fund.

DR. TONER stated that the resolution so recommending would have to lay over one year, under the rules. He hoped, however, that the rules would be waived for this purpose by unanimous consent.

Objection was raised, and a motion to lay the resolution on the table was agreed to.

DR. TONER moved that $1,000 be appropriated out of the funds of the Association for the McDowell fund.

DR. HOWARD moved the point of order that it was a rule of the Association that no new business should be transacted except on the first and fourth days of the session of the Association, and hoped the rules would not be departed from. The Chair decided the order well taken, and the motion of Dr. Toner was declared out of order.

DR. SIMS said he was as anxious as any one to secure the money asked for, but after conversation with gentlemen around him he was satisfied the subject could not be discussed to-day. The Association would have to defer action until to-morrow.

DR. HENRY A. MARTIN, of Boston, moved that a committee be appointed by the Chairman to take into consideration the subject of bovine vaccination as compared with the usual arm to arm practice, to report

at the next annual meeting. The motion was adopted, after which the Association adjourned at 9.30 A.M. on Friday.

AFTERNOON AND EVENING.

The sessions held their usual meeting in the afternoon and completed the business before them.

The evening was spent on the part of the members in responding to invitations to the receptions of the following Philadelphian physicians and surgeons: Drs. D. Hayes Agnew, J. Solis Cohen, Louis A. Duhring, H. Lenox Hodge, John H. Packard, William H. Pancoast, William Pepper, and Ellwood Wilson.

FRIDAY, JUNE 9—FOURTH DAY.

The closing session of the Association was held in Horticultural Hall, and was called to order by the President at 9.30 A.M.

A charge against the State Society of Illinois was referred to the Judicial Council.

THE GRADUATION OF "IRREGULAR" PERSONS.

DR. TONER, of Washington, offered the following, which was unanimously adopted:

Resolved, That members of the medical profession who in any way aid or abet the graduation of medical students in irregular or exclusive systems of medicine, are deemed thereby to violate the spirit of the ethics of the American Medical Association.

STATE BOARDS OF HEALTH IN EXISTENCE.

DR. W. B. ATKINSON, the Secretary, presented a report which stated that in obedience to the resolution adopted at the session of 1875, he reports that in reply to his inquiries he is informed that Boards of Health exist in Alabama, California, Georgia, Massachusetts, Michigan, Minnesota, Virginia, and Wisconsin. He had written to the Governors of Delaware, Indiana, Iowa, Nebraska, New Jersey, New York, South Carolina, Texas, and Vermont with almost negative results.

CATALOGUE OF NATIONAL LIBRARY.

DR. H. C. WOOD, of Philadelphia, offered the following, which was adopted:

Resolved, That a committee of three be appointed by the Chair to obtain from Congress an appropriation for the publication of the subject catalogue of the National Library, and that the State Societies are requested to take such action as may be deemed fit to further said object.

OFFICERS ELECTED FOR 1877.

The Nominating Committee next presented the following report through their Chairman, which was duly adopted:

President—Dr. Henry J. Bowditch, of Massachusetts.

Vice Presidents—Dr. N. J. Pittman, of North Carolina; Dr. Franklin Staples, of Minnesota; Dr. Joseph R. Smith, of U. S. Army; Dr. Samuel C. Busey, of Washington, D. C.

Treasurer—Dr. Casper Wister, of Pennsylvania.

Librarian—Dr. William Lee, of District of Columbia.

Committee on Library—Dr. Johnson Eliot, of District of Columbia.

Assistant Secretary—Dr. J. H. Hollister, of Illinois.

Committee of Arrangements—Drs. N. S. Davis, J. W. Freer, H. A. Johnson, T. D. Fitch, H. W. Jones, Joseph P. Ross, Leslie Curtis.

Committee of Publication—Dr. W. B. Atkinson, chairman; Dr. T. M. Drysdall, Albert Fricke, Samuel D. Gross, Casper Wistar, Richard J. Dunglison, all of Pennsylvania; and Dr. Williams, of District of Columbia.

Next place of meeting—Chicago, Ill.

Time of meeting—First Tuesday in June, 1877.

Judicial Council—Drs. N. S. Davis, of Illinois; E. L. Howard, of Maryland; W. O. Baldwin, of Alabama; H. W. Dean, of New York; A. N. Talley, of South Carolina; J. P. Logan, of Georgia; and D. W. Stormont, of Kansas, in place of the seven whose terms expire at this meeting. The rest of the present Council continue.

Committee on Prize Essays—Dr. N. S. Davis, Illinois, chairman; Edmund Andrews, E. Ingalls, Moses Gunn, E. P. Cook, all of Illinois.

Special Committee on Influence of Climate in Pulmonary Diseases in Florida—Dr. E. T. Sabal, continued.

DELEGATES TO INTERNATIONAL MEDICAL CONGRESS.

Delegates to the International Medical Congress to be held September 4th, 1876, at Philadelphia: Drs. H. I. Bowditch, Massachusetts; E. Seguin, New York; Thomas L. Maddon, Iowa; J. S. Welford, Virginia; A. Dunlap, Ohio; John T. Hedgen, Mo.; Joseph Carson, Pa.; John C. Dalton, N. Y.; W. O. Baldwin, Ala.; D. W. Yandell, Ky.; N. S. Davis, Ill.; Austin Flint, Sr., N. Y.; T. G. Richardson, La.; W. F. Westmoreland, Ga.; A. M. Pollock, Pa.; Frank Hastings Hamilton, N. Y.; G. M. Bemiss, La.; L. A. Dugas, Ga.; Francis Bacon, Conn.; Hunter McGuire, Va.; A. G. Shortleff, Cal.; E. M. Moore, N. Y.; O. W. Holmes, Mass.; G. A. Otis, U. S. Army; F. E. Gunnell, U. S. Navy; E. C. Harwood, of New York.

SALARY OF THE PERMANENT SECRETARY.

On the motion of DR. J. L. ATLEE, of Lancaster, the salary of Dr. W. B. Atkinson, the permanent secretary, was made $1,000 for the past year.

THE NECESSITY FOR STATE BOARDS OF HEALTH.

DR. BELL, of Iowa, offered the following, which was adopted:

Resolved, That there be appointed a committee of three persons, members of this Association, in each of those States where there has been no action taken for the establishment of Boards of Health, to urge upon those States the necessity of the establishment of such Boards.

A LIST OF REPUTABLE MEDICAL COLLEGES ASKED FOR.

A communication was read from the Centennial Commissioners from Victoria, asking information as to the list of medical colleges in good standing in this country. A motion was made to refer it to the Judicial Council.

DR. BUSEY said the Judicial Council did not have the right to determine the standing of any college.

DR. FROTHINGHAM, of Michigan, said the quarrels about the colleges were a disgrace to the profession.

On motion of DR. TONER, the whole matter was laid on the table.

CLOSING ADDRESSES.

The newly-elected President, Dr. H. I. Bowditch, of Massachusetts, was then conducted to the chair, and DR. SIMS, the retiring President, delivered his farewell address. He said the work transacted during the past three days would exhibit to science a record of progress greater than ever before. At this meeting many familiar faces had been missed. Francis Gurney Smith, who had served them long and faithfully, was abroad to recuperate his shattered health.

The absence of so many of our Southern brethren was not due to any lack of interest in the proceedings. He thanked God that the day of strife had been passed, and passed forever. Where there had been bitterness and hate, now there was kindness and affection. What higher proof could there be of this than the election of a man educated at the South? At this time Massachusetts and South Carolina can join hands. (Dr. Sims then clasped the hand of the newly-elected President, Dr. Bowditch, the act being received with shouts of applause.)

Dr. Bowditch then addressed the Association, and said the place had sought him and not he the place. He deemed it a special honor to occupy the position in this Centennial year. In conclusion, he returned his sincere thanks.

Dr. GRISSOM, of North Carolina, thanked Dr. Sims for his remarks.

THE UNITED STATES PHARMACOPŒIA.

DR. E. R. SQUIBB, of Brooklyn, N. Y., remarked upon the practicability of revising the Pharmacopœia, after which he offered the following, which were adopted:

Whereas, The usual time for a decennial revision of the United States Pharmacopœia is drawing near; and

Whereas, The plan of revision and publication in force since 1820 may not now be the best that could be devised; therefore, be it

Resolved, That the American Medical Association take the whole subject of the National Pharmacopœia into consideration for a revision of its management, and for the present time, with especial reference to the following questions:

First. Whether the present plan of decennial revision and publication be practically sufficient for the needs of the Materia Medica and Pharmacy of the present time, and, if not sufficient, whether a plan could be devised which might offer probable advantages enough to justify an attempt to disturb the present one.

Second. Whether this Association be the proper custodian in this country of the interests involved in the National Pharmacopœia; and if it is the proper source of the National Codex, whom can it invite to co-operate with it in the work?

Third. If it be a work for this Association, in what way can its details be wisely undertaken with any prospect of material improvement upon the present plan?

Resolved, That in order to facilitate mature and general deliberation upon so important a subject, the final discussion of these resolutions be laid over at least one year; and that the matter be recommended to the President of the Association for consideration in his annual address for the meeting of 1877.

On motion, the thanks of the Association were returned to the Messrs. Kiralfy, proprietors of the Alhambra Theatre, for the loan of their beautiful building on Thursday.

The Association then adjourned *sine die*.

NEW YORK COUNTY MEDICAL SOCIETY.

Stated Meeting, May 22, 1876.

DR. H. B. SANDS, PRESIDENT, IN THE CHAIR.

ON A LOST ART IN SURGERY.

DR. A. B. CROSBY, in an interesting paper upon the above subject, was inclined to the opinion that man was a dirty animal, and if by means of water he improved upon his condition in that respect, he deserved commendation therefor. Man might be in respectable health in spite of filth, but *cleanliness* was the *sine qua non* of the successful surgeon, for filth in a wound meant poison, and poison meant death. The doctor believed that cleanliness in its highest sense was almost unknown in the metropolitan hospitals of the world, hence a *lost art in surgery*, and to indicate how it was to be restored was the object of the paper.

Dr. Crosby gave a brief account of the first pavilion hospital built during the late war, and erected under his supervision in the summer of 1861. He received for its first occupants the wounded from the battle of Ball's Bluff. The doctor, at the time of its erection, was entirely ignorant of the action that had been taken by the Sanitary Commission, and the building was occupied before their action was announced. In that hospital the sum of the treatment was absolute cleanliness; cleanliness with reference to the floors of the wards, the body and bed linen of the patients, and the bodies of the patients were also sponged with warm water very frequently. All the wounds were treated openly; all offensive wounds were treated with antiseptics; and no wound was brought together until the surface was covered with fresh healthy granulations. Absolute cleanliness, nutritious food, and pure air formed the tripod upon which the hospital rested, and to those the excellent results were mainly attributed. "Fortunately," said the doctor, "our requisitions for drugs remained unfilled," and the medical supplies consisted chiefly of opium, whiskey, and a few pounds of copperas, which was obtained at a country store, and was pulverized and administered mixed with molasses. Of all cases treated, only ten per cent terminated fatally.

Dr. Crosby next referred to the terrible mortality at one time seen in the wards of one of the divisions in Bellevue Hospital; gave an account of the disinfecting process* instituted and executed by Prof. Doremus; and cited the results obtained since the disinfection, the wards being occupied by surgical cases under the care of Dr. James R. Wood. Since the disinfection no cases of erysipelas, gangrene, ulcers, or burns had been permitted to enter the wards; and if, by mistake, a case of either of those affections had gained entrance, or had developed in the wards it was at once removed, and the bed thoroughly cleansed before being occupied by another patient. Sponges were discarded; each patient had his own bottles and brushes, and brushes were used but once; instruments and the hands of the attendants were washed in carbolized water before passing from one patient to another, etc., etc. In short, absolute cleanliness and continued disinfection had prevailed; and the result had been that pyæmia had not been seen, only one or two cases of erysipelas had occurred, and those had been in cancerous cases; and Dr. Crosby had treated successfully, in the same wards, compound comminuted fractures, with extensive laceration of the soft parts.

"Sepsis," said the doctor, "has not gained a habitat in these wards since disinfection and cleanliness have been absolutely enforced."

A similar train of facts was brought forward with reference to the Long Island College Hospital. In that institution clean hands, clean wounds, clean

* A detailed account of the process of disinfection, carried out by Prof. Doremus, may be found under the head of remarks made by Dr. Lordyce Barker, in the discussion of Dr. W. T. Lusk's paper "On the Genesis of an Epidemic of Puerperal Fever," and published in the number of the MEDICAL RECORD for October 23, 1875. An abstract of Dr. Lusk's paper can be found in the same number of the RECORD.

sponges and clean everything had driven the enemy out; and the chlorinated liquor of soda had become a standing monument over the grave of the schizomycete.

The doctor maintained that sepsis in a hospital was a crime, that cleanliness would prevent its extension, and disinfection would drive it from its stronghold; and that the facts recited plead with mute eloquence for the restoration of the lost art. Every possible connection from one wound to another, however, must be cut off, or the original evil would crop out.

Perhaps the most important feature of the paper was its bearing upon the question whether metropolitan hospitals which have been occupied for many years could be cleansed and rendered as safe as new structures? The pavilion plan has received general recognition; and with such recognition has come, at least, a tacit condemnation, for hospital purposes, of those structures which consist of several series of rooms, one above the other, and enclosed by brick or stone walls. Now, if such buildings, which have become infected, can be disinfected—which have been poisoned, can have that poison dislodged—an immense amount of money and hard labor could be saved. Dr. Crosby was of the opinion that all such poisoned wards might be entirely and perfectly disinfected, if recourse was had to proper measures.

The paper was discussed by Drs. Ludlum, Janeway, Sell, and Sands. At the close of the discussion, Dr. Janeway exhibited a leucocythæmic spleen, having measurements next to the largest upon his records. It was removed from the body of the man (Case I.) whose history was given in the paper from Dr. Janeway, lately published in the RECORD, measured fourteen inches longitudinally, by nine inches transversely, and was four inches thick and weighed seven and one-half pounds. The liver of the same man weighed seven pounds and contained spots of leukæmic formations. The left kidney was atrophied from pressure, and had quite a sulcus made by the spleen. The sp. gr. of the blood was 1036. Farther analysis had not been completed.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, May 26, 1876.

DR. E. G. LORING, PRESIDENT, IN THE CHAIR.

ON SOME POINTS IN THE ETIOLOGY OF HEREDITARY SYPHILIS.

DR. F. R. STURGIS, in a concise and brief paper upon the above subject, presented a criticism upon the opinion still entertained by a large part of the medical profession, that the ovum in utero may become infected with syphilis through the semen, without the transmission of syphilis to the mother, either by the father or by the fœtus.

Dr. Sturgis was of the opinion that those who still adhered to this doctrine entered the discussion in the face of three disadvantages.

1. They were obliged to prove positively the presence of syphilis in the father and child.

2. The non-existence of the disease in the mother, past, present, and future.

3. To explain certain anomalous cases and conditions which did not perplex those who held to contrary opinions, for they had only to prove that the mother and child were healthy.

In criticising the opinion stated, the doctor asked the question, "Why is it unlikely that syphilis should exempt the mother and attack only the ovum?"

Infection by the natural excretions of the body, viz.: the sweat, saliva, tears, milk, etc., had been exploded as impossible, and yet the semen, according to the theory advanced, was capable of transmitting syphilis to a fœtus that might remain in utero until full term, without danger to the mother; but as soon as born, became a centre of contagion for all non-syphilitic persons who might be so unfortunate as to have the blood or secretions from mucous patches of the child brought in contact with their absorbents; the mother, however, escaping.

The doctor believed that such doctrine set aside endosmosis and exosmosis of the syphilitic virus, and, if true, gave rise to an important question, namely, How was the absorption of the virus in cases of acquired syphilis to be explained?

When the doctrine was studied from the hereditary point of view, it was found that syphilitic mothers gave birth to syphilitic babies in instances where the father was healthy; and if the virus had not transuded through the walls of the maternal blood-vessels, when and how did the child become infected? Dr. Sturgis criticised quite extensively the cases reported by M. Kassowitz, of Vienna, who is the latest writer in support of the theory enunciated. The records of the K. K. Fündlehaus covered 400 cases; and in 122 of those, the condition of the mother had been reported as unknown. The term "unknown" was objected to, and the record shown to be decidedly opposed to the experience of Oewre of Christiania, for instance, who had reported 100 cases, and had not been obliged to give the condition, relating to syphilis, of any mother as unknown. The question upon which Dr. Sturgis's criticisms turned, was whether syphilis was conveyed to the ovum through the semen; and it was found, after examining some of Kassowitz's cases, that the conclusion that it had been, was founded partly upon the fact of the occurrence of several miscarriages, without the presence of syphilitic symptoms on the part of the mother. Interesting cases from Caspary and Langston Parker were also recited; and from them all, the doctor arrived at the conclusion that the mother's good health, in instances where she had given birth to syphilitic children, had been *only* apparent and *not real*.

Dr. Sturgis then turned to the other side of the question, where syphilitic fathers begat healthy children, so long as the mothers remained healthy. The evidence upon that point was regarded as straightforward, and although not original with, was brought out prominently by, Cullerier in 1854. Allusion was then made to cases bearing upon that side of the question, and reported by Notta, Charrier, Diday, Mireur and Oewre. In addition, Dr. Sturgis presented the records of three cases which had fallen under his own observation, and in which the evidence seemed conclusive, that mother and children remained uninfected if only the father was syphilitic; *i.e.*, that they escaped infection through the semen. Dr. Sturgis, however, regarded the question as knotty and difficult of solution, although important.

The paper being open for discussion, Dr. F. N. Otis remarked that there were many elements of doubt in all those instances reported where syphilis had been transmitted from father to child without the intervention of the disease in the mother. Those elements were so numerous, that he could not but think that many mistakes had been made, and it was to be regretted that there was no more definite method of obtaining absolute information concerning the inoculability of the seminal secretion. Until absolute results from inocu-

lation could be had, the seminal fluid being introduced into healthy persons, we should be justified in claiming the benefit of the doubt. Dr. Otis farther remarked that he was a believer in the cessation of the inoculability of the syphilitic poison. For example, a man who had passed through the active stage of syphilis, and was suffering from what are commonly called syphilitic sequelæ, perhaps at the end of four or five years, and following a thorough treatment, could not transmit the disease in any way. The mucous erosions which were sometimes seen, and which resembled very closely syphilitic processes, the doctor believed to be due to other causes than syphilis; for instance, indigestion, excessive use of tobacco, etc. With reference to the communication of syphilis from the sequelæ of the disease, Dr. Otis related a peculiar case, which illustrated the difficulty sometimes met with in obtaining reliable evidence. A man who had had the initial lesion of syphilis, followed by secondary eruptions, married a healthy woman, who gave birth to a child, which was healthy and remained so, as far as syphilis was concerned. The man had a morbid feeling that he should communicate syphilis to his wife. Time went on, and at the end of five or six years after the original chancre, the wife was brought to the doctor with what subsequently proved to be a syphilitic tubercle upon the thigh, and soon after mucous patches appeared in the mouth.

The social position of both husband and wife was, to all appearances, entirely beyond suspicion, and the case became exceedingly perplexing to the doctor. How was the presence of the syphilitic lesions in the woman to be explained? The doctor had an interview with the woman and told her his suspicions, and also, that her husband felt convinced that he was the cause of her troubles, whereupon she claimed that her husband was a model of purity, and at the same time acknowledged that she had had connection with an old lover while off upon a yachting excursion.

In closing, Dr. Otis remarked that he had never seen syphilis communicated four or five years subsequent to the active manifestation of the disease, and always doubted the reliability of the history of such reported cases.

Dr. Quackenboss regarded the transmission of syphilis as positive in one respect, viz., if a woman was syphilitic, her children would certainly be; and he was equally certain that a syphilitic father would beget healthy children in about ninety out of a hundred instances.

The doctor related a curious case, and one not easily explained.

A perfectly healthy woman married and gave birth to a healthy child; subsequently the husband gave her chancres, and the wife obtained a divorce. She was treated, and, apparently, became perfectly well; in due time she was married to a healthy man, became impregnated, and gave birth to a child unmistakably syphilitic.

Where had the poison been during the seven or eight years subsequent to the active manifestation of the disease, which finally showed itself in a distinctly syphilitic infant?

The paper was also discussed by Drs. McIlvaine, Bulkley, and Tauszky.

Telegraph Wire Extemporized for Field Surgery.—In an article with the above title, Surgeon-Major J. H. Porter (*British Med. Jour.*, May 27) describes a very ingenious method of constructing splints from telegraph wire.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, May 18th, 1876.

Dr. S. S. Purple, President, in the Chair.

ON FATTY DEGENERATION OF THE PLACENTA AS A CAUSE OF DEATH IN THE FŒTUS.

Dr. Charles A. Leale read an interesting paper upon the above subject, in which he presented certain clinical records with the view of exciting discussion concerning the proper measures to be adopted to prevent the woman from being delivered of a dead child. Fatty degeneration was regarded as the result of a defect, and not disease of the nutrient process. Such defect might be developed in connection with syphilis, phthisis pulmonalis, scrofula, apoplexy, and other conditions, and give rise secondarily to fatty degeneration. The Doctor read the histories of cases in which he had found the following changes, which had evidently given rise to such disturbances in the process of nutrition as to cause the death of the fœtus, or reduce it to the lowest grade of vitality consistent with the possibility of prolonging its life. Fatty degeneration coincident with syphilitic sperm, the mother being healthy; simple fatty degeneration following placentitis caused by blow upon abdomen; fibrinous deposits in three placentæ from a mother who had cavities in both lungs, and the father had had morbus coxarius; tuberculous placenta from a mother with cavities in both lungs; syphilitic fatty degeneration in a case in which several miscarriages had occurred within six years; apoplexy and calcareous degeneration in a healthy mother who gave birth to a child weighing 11¼ lbs. The Doctor related a case in which cancer of the cervix was present, but its growth had been retarded by the use of strong nitric acid, and the woman became pregnant. Labor was uncomplicated, the child was healthy, and no changes were found in the placenta. The cancerous growth became active six months after parturition. Dr. Leale also gave a detailed history of a case in which successive abortions had been succeeded by the delivery of a living child in consequence of labor prematurely induced.

Premature labor had been advised by Dr. Fordyce Barker as a measure to be adopted for securing the delivery of a living child; and the symptoms of alarming prostration on the part of the mother, in that particular instance, together with the feebleness of the fœtal heart, were the indications which decided the time when Dr. Leale should execute the plan recommended. The child was exceedingly feeble when born, but its life was saved by dint of perseverance in the most careful and tender nursing. The placenta was found so far advanced in fatty degeneration as to be more than two-thirds useless, there being no doubt in this instance that the life of the child would have been sacrificed if it had been permitted to go the full term of utero-gestation. The conclusions arrived at by the Doctor concerning the subject under consideration were mainly as follows:—

Fatty degeneration of the placenta was a cause of death in the fœtus more commonly than was generally supposed; its access might be insidious and its progress slow

The causes were uterine and ovarine anomalies, insufficient vitality of the ovule, disease of the ovule, insufficient vital force in sperm, disease of sperm, emotional causes, or shock causing paralysis or incomplete detachment of placenta, etc.

The varieties were tuberculous calcareous degeneration with fibrinous deposits, anæmia with atrophy, simple fatty degeneration, degeneration from apo-

plexy, scrofula, syphilis, and waxy degeneration associated with leucocythæmia.

As a measure for securing the delivery of a living child in cases in which fatty degeneration of the placenta was suspected, and constitutional treatment had failed or was not indicated, where the life of the mother or the child was endangered by delay, Dr. Leale recommended the induction of premature labor at about the thirty-sixth week of utero-gestation, in accordance with the suggestion made by Dr. Barker in the case to which allusion had been made.

The paper being open for discussion, Dr. Isaac E. Taylor remarked that the subject was one in which he had been interested for many years, and while it was true that the placenta might be the subject of congestion, inflammation, apoplexy, calcareous and fibrinous deposits, and fatty changes, the view that fatty degeneration was uniformly the cause of death in the fœtus was not generally accepted by the profession. For the child might become the seat of disease dependent upon constitutional vices of the parents, one or both, as well as the placenta, and such disease might be the cause of the death of the child rather than the changes in the placenta at the same time present. Fatty degeneration of the placenta Dr. Taylor regarded as a very common condition affecting the maternal or fœtal side, or intermediate portions, or all three together, and might be developed as a primary change in the placenta, or as secondary to constitutional disturbances. He regarded some of the cases reported by Dr. Leale as those in which the child had died in utero, and that the placental changes were secondary. Dr. Taylor related a case then under observation in which it was evident that the child had been dead ten days and yet the placental souffle could be distinctly heard. Fourteen days had been regarded as sufficient time to allow changes to take place which would arrest the souffle after the death of the fœtus. He was of the opinion, therefore, that in very many instances the retrograde changes which were found in the placenta were normal, having taken place subsequent to the death of the child, and had nothing to do with the sacrifice of its life. There were cases, undoubtedly, in which the changes that had taken place in the placenta, had directly contributed to such sacrifice, but it was not to be regarded as an easy matter to decide with reference to the measures to be adopted for the prevention of such results, especially as regarded the induction of premature labor.

Dr. Peaslee remarked that changes affecting the placenta might occur either upon the maternal or upon the fœtal side, and that it was important to determine upon which side the change had commenced. If, for example, the mother was tuberculous, and gave birth to children prematurely, and tubercles were present in the placenta, it might be reasonably inferred that the trouble was upon the maternal side entirely. If there were evidences of placentitis, it was vastly more probable that it commenced upon the maternal than upon the fœtal side, although it was not impossible for it to begin upon the fœtal; and to be the cause of fatty degeneration, it might originate upon either side. It should not be supposed, because a dead child was born in connection with a fatty placenta, that such placenta was the cause of the death of the child, for it might have been just the reverse: the child having died, the placenta became fatty. The fatty degeneration being due to diminution in the circulation, which might have its origin either upon the maternal or fœtal side, it became important in every case to determine upon which side it commenced. For, if it began upon the fœtal side it was regarded as extremely difficult to do anything to evade the disastrous consequence. We might cause the mother to inhale more oxygen, but the efficacy of the measure would be very doubtful. On the other hand, if anything could be done to improve the circulation of the mother when the change in the placenta had its origin upon the maternal side, we might perhaps succeed in saving the life of the child. But there was another question. It was supposed, for example, that a woman had had a series of miscarriages the first perhaps at the end of the third month, the second at the end of the fourth month, the third at the end of the fifth month, etc.; in such a case the doctor was of the opinion that the trouble was to be found upon the part of the fœtus, for the reason that the ovum itself was probably deceased. If the ovum—and the placenta was regarded as nothing more than a part of the ovum—became impregnated with diseased semen, it might or it might not remain alive; but allowing that in the course of time it died, the question then arose: Did it become as a matter of course true that the difficulty began upon the mother's side, or upon the fœtal side? Why did the mother develop an ovum which was cast off in one instance at three months, in another at four months? etc. What was to be inferred? Not necessarily that she was in a different condition with each succeeding pregnancy, but rather that there was some different condition in the ovum itself, or in the semen by which it was fecundated. The doctor was of the opinion that, in every case where such an experience had been developed, the difficulty commenced in the ovum, and that inasmuch as it could not be accounted for by subsequent influences upon fecundation, it must be referred to the semen, or that the father, who has had syphilis, was getting farther and farther from its effect; consequently the fœtus retained its vitality longer and longer with each pregnancy, and after a while lived to eight or nine months. Just then Dr. Peaslee raised the query whether it was a fact that a woman could be delivered of a child which had died in utero prematurely by reason of syphilis, without having the disease herself. The doctor remarked that he should in every instance in which successive abortions occurred each time at a little later period in utero-gestation, accuse the father of having had syphilis. In such cases much could be done to prevent the occurrence of the miscarriages by treating the father for syphilis, and the main idea was to get it out of the husband's system as soon as possible. At the same time it was well to give the mother assurance that she might at some future date have a living child.

With regard to cancerous placenta occurring with cancer of the uterus he had never known an instance, and he did not suppose that it would occur upon the part of the mother, although she might have cancer of the cervix preceding her pregnancy. For, the cervix might be affected by cancerous disease and the body of the uterus remain unaffected; and that was the rule. Reference was then made to three cases of cancer of the cervix in which the women did well during their confinement; there was no disease of the placenta, but the children were all very small

Dr. Joel Foster asked Dr. Peaslee whether he would induce premature labor in cases where it was quite evident that fatty degeneration of the placenta was present, having its commencement with the mother?

Dr. Peaslee replied that he should hesitate with regard to the performance of the operation; that he would be influenced by the condition of the fœtus and be ready to interfere at any time if it became necessary.

Dr. Mundé was of the opinion that the induction of premature labor at the end of the 36th week, as a general rule in cases of supposed fatty degeneration of the placenta, was not justifiable. The plan would be especially unjustifiable if resorted to for the purpose of saving a child while it was under syphilitic influences in utero. In such cases the anti-syphilitic treatment would do all that was necessary. Dr. Mundé was of the opinion that medical men were liable to attribute too much importance, in many cases at least, to the condition of fatty degeneration present in the placenta at the time of the confinement. For example, a child was born and presented a shrivelled appearance, the placenta had a pale look, was soft and flabby, and it was commonly said that it had undergone fatty degeneration. When, however, it was examined microscopically, nothing more was found than might be expected in placentæ in general, for normal fatty change commenced to take place at about the eighth month, and in some cases it became much more marked than in others without necessarily affecting the fœtus. It was not to be concluded because a placenta looked fatty that it was in an abnormal condition.

Dr. Peaslee supposed two cases and raised a question. First, suppose a woman has clearly had syphilis, had a miscarriage at the third, fourth or fifth month, and the placenta had undergone fatty degeneration.

Second, a woman without trace of syphilis had miscarriages as in the first instance, and there was fatty placenta, but in addition the husband had been known to have had syphilis.

Now, did it make any difference with regard to the treatment? Should anti-syphilitic treatment of the mother be resorted to only in the first instance, or should it be resorted to at all events?

If in the last instance a mother without syphilis gave birth to a child prematurely, and there was fatty placenta, the Doctor meant to be understood as saying that probably the child died from syphilis from the father, and not because of the fatty degeneration of the placenta. On the other hand, if she had had syphilis, and the husband not at all; whether the fatty degeneration of the placenta was caused by the death of the fœtus, or whether the syphilitic affection of the mother caused the fatty placenta, and causing the death of the fœtus the case was exactly reversed; then there would be reason for adopting the anti syphilitic treatment of the mother.

At that point, Dr. Peaslee raised another question: Had any one known of an instance where anti-syphilitic treatment had arrested a series of miscarriages occurring in a woman who had not had any signs of syphilis? If any such cases were known, he would explain them upon the ground that the anti-syphilitic treatment had acted directly through the mother upon a fœtus having syphilis.

Dr. Taylor mentioned a case in which the father was syphilitic and the mother perfectly healthy. The mother had a series of abortions at the third, fourth, fifth months, etc., and the husband died. The widow married a perfectly healthy man, and the first of her second stock of children was syphilitic, but the second and third, after the mother had been subjected to anti-syphilitic treatment, were healthy. Dr. Taylor was of the opinion that anti-syphilitic treatment should be adopted in cases in which abortion after abortion had occurred, and although it might not be successful in preventing its occurrence in all cases, in a certain number the results obtained would be most satisfactory.

Dr. Hanks recommended that anti-syphilitic treatment be adopted for both husband and wife in cases where repeated abortions had occurred, independent of displacement or other local cause.

Dr. Mundé regarded this question with reference to the effect produced upon the fœtus by remedies acting through the mother as yet *sub judice*.

Dr. Leale stated that in nearly all of his mentioned cases, the degeneration of the placentæ must have occurred prior to the death of the child, as demonstrated by diseased placentæ and the birth of living children.

Dr. Leale raised a question: A healthy woman married a syphilitic man whose sperm gave all the appearances of healthy semen when examined with the microscope, and yet conception did not take place. The husband died, the woman married again, and under such circumstances had the woman ever conceived? Had any such case been known in which conception had taken place?

On motion, the Academy adjourned.

The Coca or Cuca Leaf and its Effects.—The alleged use of this plant by Mr. Weston in his great pedestrian feats, has brought the subject before the medical profession of England, and Mr. Robert Christison and Mr. G. F. Dowdeswell have furnished some interesting facts on the properties and action of the leaf. The early history of Peru, says Mr. Christison, informs us that Cuca was used in Peru at the time of its conquest by the Spaniards. Pöppig, a German naturalist who lived in Peru for five years, after observing the habit of chewing the Cuca leaves by the inhabitants, came to the conclusion that its use is as seductive and injurious to the health, mind, and morals, as drinking or opium eating. Its victims lie in the open fields dreaming beautiful dreams, remaining out all night indifferent to cold or rains. In the end, however, the stomach gives way, the face becomes haggard, and the victim dies of all sorts of maladies. Other authorities think that the accounts given by Pöppig are much exaggerated. Dr. von Tschudi, in his visit to Peru, found it relieved the difficult breathing which is felt in ascending eminences. He thought that the moderate use of Cuca might be conducive to health. Without it, the poorly-fed Peruvians Indians would be incapacitated from performing their labor. The plant from which the leaves are obtained thrives best in the elevated forests of the Andes. In time it is covered with delicate white flowers, which are succeeded by red berries. The leaves can be stripped from the plant three times a year, and are at once thoroughly dried. When the packages of Cuca are opened, they emit a powerful tea-like odor. Mr. Christison has tried the effects of the leaves upon himself. He has taken long and fatiguing walks, living at the same time after his usual manner; then he has repeated the walks for even greater distances, and when overcome with fatigue, at some resting-place, he has chewed thoroughly, and swallowed eighty grains of Cuca. No real effects were observed until he went out of doors and resumed his rapid walking; then all sense of weariness disappeared, and he could walk, not only with ease but elasticity. At the end of the walk the pulse was 90; and in two hours fell to 72. At dinner-time there was neither feeling of hunger nor thirst, after abstaining from food for nine hours; but upon dinner appearing, ample justice was done to the meal. No unpleasant effects were felt the next day. Mr. Dowdeswell, in an article in the *Lancet* for April 29th, 1876, has the same idea as to the great and wonderful powers of endurance gained by its use.—*British Medical Journal*, April 29th, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, June 17, 1876.

THE ENGLISH DEBATE ON SYPHILIS.

IV.

In contrast with the admirable contributions of Sir Wm. Jenner, the remarks of Dr. Moxon are noticeable for their tedious prolixity and their sophistical character. We must express both our surprise and disappointment at this effort of a man, who, by his writings upon visceral syphilis, has heretofore commanded our highest respect. In fifty-six observations of visceral syphilis, he had found the average period of life to have been thirty-seven years, and his experience had taught him that in such cases the prognosis was not good, as the future of such patients was a short one. He differed from Mr. Hutchinson's view as to the non-specific nature of tertiary lesions, and considers that the necessity of mercury for a total cure of them proves them to be related to the secondaries. He emphasized the admission of the orator that the want of symmetry of tertiaries was really due to the condition of abundance; and considered that this, in truth, conceded the relation of both classes of lesions. While he agreed with Sir Wm. Jenner that the lesions of typhoid fever were very rarely symmetrical, he did not consider that the comparison offered by Sir James Paget, that such sequelæ of this disease as the suppuration of one rib or of phlebitis of one vein, applied at all to the distribution of tertiary syphilitic lesions. He believed that these latter lesions were often symmetrical, and cited instances of such, the most noticeable of which was that of a gumma involving each root of the vagus. He alluded to the fact that such diseases as pityriasis versicolor and trichiniasis, well known to be unconnected with blood taint, were frequently symmetrical. He further differed with Mr. Hutchinson as to the theory of the possible relation of the secondary and tertiary lesions, which we have explained in a previous number, and advanced the hypothesis that perhaps the latter attacked tissues which had not been affected by the former. In support of this, he ventured an unsatisfactory line of argument; and misapplied, in his comparison, certain well-known facts. Indeed, we hardly think he was sincere in this part of his remarks; as they convey the impression that he thought Mr. Hutchinson's theory, to say the least, untenable, if not ridiculous; and that he might, by way of pleasantry, propound one equally absurd. We must, however, credit Dr. Moxon with a happy and apposite expression in calling syphilis "a fever diluted by time."

The remarks of Mr. Thos. Smith, who opened the debate at the fourth meeting, were of a personal character and contain no noticeable point. He regards syphilis as a blood disease, and its tertiary lesions as evidences of such, thinks that secondary supplies is not very symmetrical; that the tertiary form was not always unsymmetrical in its manifestations, and did not admit that the risk of contagion ceased long before that of hereditary transmission. The simile traced by this gentleman between the course of gout and syphilis need only be mentioned as being badly taken, and not by any means conclusively proven. This being alluded to, later on by Mr. Simon, Mr. Smith said he wished merely to contrast gout with syphilis.

Sir Wm. Gull thought that if syphilis were classed with the specific fevers it should be conceded that it was not like the rest of them, limited by time. He regarded gummata as specific lesions, and that a general condition of the system was always present with them. He did not care to open the question of blood diseases, but stated his belief, that as there was no tissue in which syphilis might not produce its manifestations, it was, therefore, "a flesh and blood disease." This expression of Sir William is certainly significant and pertinent, and shows that he, as well as Sir William Jenner, look further than the majority of those concerned in the debate, in not being satisfied with the explanation of the nature of the disease on exclusively humoral doctrines. Sir William thought that syphilitic symptoms might continue throughout life, and be found in the hair, the complexion, and the odor of the sweat. The last symptom certainly appears to us to be a novel one, as caused by syphilis, yet it was spoken of by this distinguished authority as having been recognized by him, as he says he had under his care a man supposed to be suffering from tuberculosis, who "smelt of syphilis." We would commend to our readers the study of this peculiar odor, as it is a symptom which, if quickly and positively recognized, may be of much assistance in cases of doubt. It is to be regretted that we have not fuller information as to its qualities and characteristics. As might be expected, the remarks of Mr. Simon gave evidence of a profound knowledge of general and special pathology. He thought that it was impossible to draw an abrupt line between the secondary and tertiary stages of syphilis, and that we were not warranted in considering the disease as

no longer one of the blood, because the lesions cease to be symmetrical. This condition of asymmetry was probably due to a diminution in the quantity of the contagium, and of course the power was then also weakened. And the offspring of such a person might not be infected; still he would not say because a man had gummata, that he could not beget syphilitic children; nor because his lesions were unsymmetrical that he was no longer capable of transmitting the disease to his wife. His remarks upon the nature of sequelæ are striking. He says: "He could not understand such a thing as an active sequela in pathology. A passive sequela, such as a cicatrix, he could understand; but a renewed active growth was surely not, strictly speaking, a sequela. It implied, if anything, that the cause of the formation was still in operation." According to his experience, syphilis did not produce or modify other diseases. He neither rejected nor accepted Mr. Hutchinson's view of the origin of tertiary lesions, and hoped that the question could be studied in future whenever opportunity offered. He thought that much benefit might result in the determination of the ultimate results of syphilis by investigations into the family histories, and was undecided as to whether syphilis manifested itself in the third generation.

We might almost pass in silence the remarks of Mr. John Wood, as they were not of much importance. He evidently considers the two forms of sore as due to one virus. He did not consider tertiary lesions as sequelæ, thought that we could not draw a line of distinction between the two stages of syphilis, and that too much stress had been laid upon the asymmetry of late lesions by the orator. He alluded to the fact, in an inquiring way, of the mild course of syphilis in races among whom the disease had existed for years, and its severe effects when introduced into virgin soil. There is but little of interest in the brief remarks of the next speaker, Surgeon Robinson. This gentleman, in thirty years' experience in the Guards, nearly every man of whom had syphilis, rarely saw evidences of hereditary syphilis in their offspring, which condition he attributed to the early and thorough mercurial treatment which they are subjected to under strict surveillance.

Mr. E. Vonning called upon Mr. Hutchinson to explain more fully his position as to the question of dualism. He looked upon the soft sore as being placed in a category by itself. To this view Dr. Farquharson expressed his concurrence, and he further agreed with Mr. Hutchinson as regards the resemblance between syphilis and the exanthemata, and also as to the frequency of mild secondary lesions being followed by severe tertiaries. He admitted a syphilitic form of phthisis. The remarks of the next speaker, Dr. Greenfield, showed an intimate acquaintance with the histological pathology of syphilis supplemented by sound knowledge of its clinical history. His histological results are similar to those of previous observers. In their earliest stages syphilitic new growths consist of lymphoid tissue, mainly composed of round cells, developed chiefly in the outer coat or perivascular space of minute blood-vessels. The growth was at first highly vascular, and was succeeded by the development of an embryonic tissue. The peculiarity of the process was the invasion of the inner coat of the arteries supplying the growth, as so well shown recently by Heubner. This lesion of the inner coat caused or led to thrombosis and degeneration. Subsequently the growth was supplied by new vessels again. This process had been seen by Greenfield in the kidney, and he had also found gummata in the brain in secondary syphilis. He looked upon all syphilitic growths as due to the same cause, and direct expressions of the syphilitic action, and thought that the resemblance claimed between syphilis and the exanthemata was partial only; and in a concise and clear manner indicated the pathological differences in the courses of the two classes of disease. He inquired whether Mr. Hutchinson believed that every case of pegged teeth or of interstitial keratitis was one of congenital syphilis, as he believed that in some the condition might be due simply to an inherited tendency to imperfect development, or early decay of the more highly developed forms of connective tissue, which were the expression of the exhaustion of the power of connective-tissue formation. As showing the influence of the parent's condition on such development in the child, he instanced the occurrence of cretinism in children of goitrous parents during their residence in affected districts. He concludes his otherwise very able remarks by the suggestion that the evidence of the heredity of syphilis was accompanied by the date of occurrence of the specific eruption, which suggested inoculation at the time of birth or at the separation of the placenta. We look with surprise at such views from a man otherwise so sound in his knowledge of syphilis. It was our wish and hope to have concluded this analysis on this occasion; but such is impossible, as much yet remains to be considered—notably the extended reply of Mr. Hutchinson.

AMERICAN MEDICAL ASSOCIATION.

THE recent meeting of the American Medical Association was a somewhat unusual one, not only in reference to the importance of the subjects which were brought forward for discussion, but in the large attendance of delegates, and the general interest manifested in the proceedings. We present a full report in another column, and shall take the opportunity, at a future time, of discussing at length some of the more important questions which were presented at the meeting.

ST. LOUIS MEDICAL RECORD.—Dr. Wm. B. Hazard succeeds Dr. W. A. Hardaway as editor.

Correspondence.

THE "UNITY OR DUALITY OF SYPHILIS."

To the Editor of The Medical Record.

Sir:—I, for one of your readers, was much pleased to notice in your editorial on the English Debate upon the Pathology of Syphilis, contained in the issue of the Record for May 20th, your criticism of Mr. Hutchinson's dictum: "I think we may say of dualism that it is dead," etc., etc.; but it appears to me that you have failed to make a point, which has strangely escaped notice, viz., that, in spite of this statement, Mr. Hutchinson, as shown by his other writings and even by the full sentence of his which you quote, is himself a dualist of the first water.

Pray, what is the duality that has been contended for for the last twenty-odd years? Is it possible that it ever entered the mind of man that so-called dualists were advocating "duality" in the strict sense of the term? That they believed in two kinds of syphilitic virus? The mere asking of these questions would have been worthy of ridicule before the reading of Mr. Hutchinson's paper!

No, sir! The "duality of syphilis" was always a misnomer, and has always been recognized as such. It was adopted simply as a convenient mode of expression, at a time when new ideas were advanced, and little thought was given as to the most appropriate name by which these views should be known, and still less thought was entertained that any name adopted would ever be used in their attack or in their defence. *The term was adopted, not to signify a duality in syphilis, but a duality in what had been known as syphilis, and in what had been called by that name.*

Dualists have never recognized more than one *syphilitic* virus; they have simply maintained that there exists, independent of the syphilitic virus, another contagious principle giving rise to a local sore, known as the chancroid. This is exactly the position held by Mr. Hutchinson when he enunciates the "simpler creed which attributes the soft chancre to contagion with inflammatory products produced by syphilis, but not as a general rule containing its germs;" for here he recognizes the absence of the virus of syphilis, and assigns to the products of inflammation the evolution of the soft chancre (chancroid.)

It may be objected that Mr. Hutchinson has limited this power of "inflammatory products" to those "produced by syphilis;" but this limitation, if intended by its author, is incorrect, since, as is well known to every student, sores, with all the characteristics of the chancroid, have been produced by the inoculation of inflammatory products other than those of syphilis.

The only difference between Mr. Hutchinson's view and the one which has been entertained by the dualistic school, so far as I can see, lies in this:

Dualists have commonly maintained that the chancroid is dependent upon a distinct specific virus, incapable of spontaneous generation. Mr. Hutchinson believes that it is dependent upon inflammatory products, and hence that if every chancroid now existing in the world were exterminated, new chancroids would arise.

I confess that this view of Mr. Hutchinson—this modification, as it may be termed, of the view held by many dualists—has strong arguments in its favor, and may be looked upon as a step in advance. It, moreover, suggests an interesting analogy with the history of gonorrhœa during the last fifty years—a disease lopped off from what had been known as syphilis by Ricord, subsequently supposed to be dependent upon a virus of its own, now known to be a simple inflammation of certain mucous membranes. But whether the chancroid has a virus of its own or not, if it be recognized as due to a *cause distinct from that of syphilis*, then the position of the far-seeing, illustrious Bassereau has been established, for that was all that he claimed; he was wise enough to rest here without indulging in speculations; the terms "unity" and "duality" are not of his invention.

I cannot but regard Mr. Hutchinson's quiet burial of dualism as unfortunate, for I believe it will be found to have greater vitality than ever as years roll by, and it is a pity that it should be obliged to read its own obituary.

His well-deserved reputation, his great versatility of talent, his labor and zeal in the advancement of medicine and surgery, give to the words of Mr. Hutchinson unusual weight. By his announcement that "dualism is dead" many will be led to believe that we stand now in syphilography where we stood thirty years ago. For myself, I believe that "dualism" still lives, and that Mr. Hutchinson is, in fact, one of its most advanced apostles.

Yours truly, F. J. Bumstead.

24 East Thirty-eighth street, May 30, 1876.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from June 4th to June 10th, 1876.

Bache, D., Surgeon. To report to the Commanding General, Department of California, for assignmen to duty. S. O. 112, A. G. O. June 7th, 1876.

Hartouff, A., Asst. Surgeon. To proceed with companies at Fort Laramie to Fort Fetterman, Wyoming Territory, and accompany expedition against hostile Sioux. S. O. 68, Department of the Platte, June 2, 1876.

Brewer, J. W., Asst. Surgeon. Assigned to temporary duty as Post Surgeon at Fort Sanders, Wyoming Territory. S. O. 63, Department of the Platte, May 26th, 1876.

Tilton, H. R. Asst. Surgeon. Ordered before Army Medical Board, New York City, for examination for promotion, and on its completion return to his station. S.O. 112, c. s., A. G. O.

Whitehead, W. E., Asst. Surgeon. To report to the Commanding General, Department of the Missouri, for assignment to duty. S. O. 112, c. s., A. G. O.

Styer, Chas., Asst. Surgeon. Assigned to duty at Fort Porter, New York. S. O. 100, Division of the Atlantic, May 31st, 1876.

King, J. H. T., Asst. Surgeon. To report to the Commanding General, Department of Texas, for assignment to duty. S. O. 112, c. s., A. G. O.

Corson, J. K., Asst. Surgeon. Assigned to duty at Plattsburg Barracks, New York. S. O. 100, c. s., Division of the Atlantic.

Patzki, J. H., Asst. Surgeon. To proceed with troops from Fort Fred. Steele to Fort Fetterman, Wyoming Territory, and accompany expedition against hostile Sioux. S. O. 68, c. s., Department of the Platte.

Woodruff, E., Asst. Surgeon. Granted leave of

absence for one month. S. O. 102, c. s., Division of the Atlantic.

Ewen, C., Asst. Surgeon. Assigned to duty at Fort Hamilton, N. Y. H. S. O. 100, c. s., Division of the Atlantic.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending June 10, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
June 3.....	0	7	58	1	45	63	12
June 10.....	0	5	50	3	45	53	20

American Gynecological Society.—A number of the prominent gynecologists of the United States met at the Academy of Medicine, in this city, on June 3d last, and organized a "National Society for the Promotion of Knowledge in all that relates to the Diseases of Women and Obstetrics," to be called the "American Gynecological Society." The invitation for organization was accepted by the following thirty-nine physicians, the majority of whom were present: Fordyce Barker, T. G. Thomas, J. Marion Sims, E. R. Peaslee, T. A. Emmet, E. Noeggerath, W. T. Lusk, I. E. Taylor, Paul F. Mundé, New York City; John Byrne, J. C. Skene, Brooklyn; Jas. D. Trask, Astoria, N. Y.; J. P. White, Buffalo, N. Y.; Ely Van de Warker, Syracuse, N. Y.; Chas. E. Buckingham, Geo. H. Bixby, Wm. L. Richardson, Geo. F. Lyman, —— Sinclair, James R. Chadwick, D. Humphreys Storer, Boston; W. L. Atlee, Wm. Goodell, Albert H. Smith, R. A. F. Penrose, Ellerslie Wallace, T. M. Drysdale, J. V. Ingham, Philadelphia; E. W. Jenks, Detroit; W. H. Byford, Chicago; Theophilus Parvin, Indianapolis; George J. Engelmann, St. Louis; J. C. Reeve, Dayton, Ohio; Robert Battey, Rome, Ga.; Henry F. Campbell, Augusta, Ga.; Jos. Taber Johnson, S. C. Busey, Washington, D. C.; Wm. T. Howard Wilson, Baltimore.

The following gentlemen were elected officers for the present year: President, Dr. Fordyce Barker; Vice-Presidents, Drs. W. L. Atlee and W. H. Byford; Secretary, Dr. James R. Chadwick; Treasurer, Dr. Paul F. Mundé; Councillors, Drs. J. Marion Sims, Geo. F. Lyman, Wm. Goodell, T. Parvin.

The meetings are to be held annually. The first will take place in this city, on Wednesday, Sept. 13th.

Medical Advertising.—A most unprofessional method of advertising has recently come to our notice. A medical gentleman of this city has not only permitted the report of an operation for trephining to be published in one of the daily papers, with that exaggeration of its importance which is usual on such occasions, but has evidently offered more than the usual facilities to the reporter. After a detailed description of an ordinary operation, and its remarkable effect upon the sufferer, the account concludes as follows:

"Through the kindness of Dr. ——, the reporter was present on Wednesday last, when he dressed the wound. Upon removing the bandages a pulsating mass of brain substance, about the size and shape of an ordinary lemon, was discovered. The little patient sat perfectly still while the doctor applied the dressings, and did not seem to suffer any pain whatever. Around the base of the tumor the healing process is going on favorably, and the wound is gradually contracting, so that should the tumor slough away, and no unfavorable symptoms set in, the chances for the child's ultimate recovery are very strong."

This medical gentleman is a member of the medical society of this county. If there is any desire on the part of this organization to enforce its discipline, the present opportunity is one which should not be overlooked.

New York Academy of Medicine.—At a Stated Meeting of the New York Academy of Medicine, held June 1st, 1876, Drs. J. W. S. Arnold and Z. Swift Webb were elected Resident Fellows. Dr. Gouverneur M. Smith, on behalf of the family, presented a large portrait of the late Dr. Alfred Underhill, formerly Vice-President of the Academy.

Nurse-Training Establishments.—There are now in operation four schools for training nurses, two in New York, one in Boston, and one in New Haven. A fifth has been projected in connection with the Johns Hopkins Hospital at Baltimore.

Michigan State Medical Society and Homœopathy.—The editor of *The Canada Lancet*, in condemning the recent action of the Michigan State Medical Society regarding the question of Homœopathy in the University of Michigan, says: "What has the Society, or the members of the Faculty at Ann Arbor, to fear from the homœopathists and a small following of students, which is sure to become less every year? Nothing whatever. No; let them rather stand manfully at their post of duty; let them have faith in their own profession; let them be true to themselves and to those under their instruction, and let time, 'the arbiter of all things,' be judge of the result." In our opinion the editor is right. He is far enough from the centre of the fight to be beyond the mere prejudices of either side.

The Plague.—Since the 1st of January until the 21st of April, three hundred and sixty-five deaths have been reported at Hillah, and six hundred and forty at Bagdad. Although the number of cases in these two localities is decreasing, the disease is gradually spreading itself over a wide area of surrounding country, giving much cause for alarm.

Sir William Fergusson, of London, is suffering severely from symptoms indicating emphysema of the lung and hypertrophy of the heart, complicated with albuminuria.

Poisoned by Mistake.—A case of death by cyanide of potassium, which was dispensed by the druggist for acetate of potash, is reported as occurring at Rock Ferry, near Liverpool. The bottle containing the cyanide came from the wholesale house labelled "Acetate."

Cheap Doctors.—It has been for some time the practice, in the north of London particularly, for English surgeons and apothecaries to treat patients at private dispensaries for a shilling a week. As might be supposed, there is a good deal of opposition to "the shilling-a-week system" by those who desire to practice

their profession honorably. A correspondent in the *Students' Journal and Hospital Gazette* very significantly says: "What between the shilling-a-week doctors and he who systematically gives gratuitous advice, general practitioners who will not adopt such means to attract patients stand but a sorry chance to get any practice."

Medical Journals in Columbus, Ohio.—Two new medical journals have made their appearance in Columbus, Ohio: *The Ohio Medical and Surgical Journal* (bi-monthly), edited by J. H. Pooley, Prof. of Surgery in the Starling Medical College; and *The Ohio Medical Recorder* (monthly), edited by J. W. Hamilton, Professor of Surgery, and J. F. Baldwin, Professor of Physiology, in the Columbus Medical College. With two medical journals, each managed by professors in different colleges, Columbus cannot fail to keep up its reputation as one of the many medical centres in the West. Both periodicals present a creditable appearance, and contain very readable articles. The circumstance of the simultaneous issue of the first numbers proves that the profession there have suddenly awakened to the necessity of "supplying a want which," until this time, "has long been felt."

Septicæmia from an Operation.—Dr. Wilson, a surgeon of Devenport (Eng.), recently died from the effects of blood-poisoning, caused by a wound received during an operation. His elder brother, it is stated, died from a precisely similar cause in the same town three years ago.

Sir Henry Thompson, of London, has been promoted by the King of the Belgians to the rank of the Commander of the Order of Leopold, of which he previously held the rank of Knight.

A New Test for Alcohol.—Dr. Edmund Davy, at a recent meeting of the Royal Irish Academy, described a new test for alcohol:—One part by weight of molybdic acid added to ten parts by weight of sulphuric acid forms a mixture, a drop of which, added to a solution containing alcohol, instantly detects it by producing a blue discoloration.

The Vivisection Question in England.—The Royal Commission recently appointed to report upon the subject of vivisection in England, have framed a bill with the following provisions:

1. The experiment must be performed with a view only to the advancement by new discovery of knowledge which will be useful for saving or prolonging human life or alleviating human suffering; and 2, The experiment must be performed in a registered place; and 3, The experiment must be performed by a person holding such license from one of her Majesty's Principal Secretaries of State, in this Act referred to as the Secretary of State, as in this Act mentioned; and 4, The animal must, during the whole of the experiment, be under the influence of some anæsthetic of sufficient power to prevent the animal feeling pain; and 5, The animal must, if the pain is likely to continue after the effect of the anæsthetic has ceased, or if any serious injury has been inflicted on the animal, be killed before it recovers from the influence of the anæsthetic which has been administered; and 6, The experiment shall not be performed as an illustration of lectures in medical schools, hospitals, colleges or elsewhere; and 7, The experiment shall not be performed for the purpose of attaining manual skill. The exceptions to be considered are very few, and are those which refer to the impossibility of making an experiment successful and consequently useful without violating the letter of the law, which impossibility is to be certified to by the operator. The penalty for the first offence is fixed at £50, and for the second at £100, or imprisonment not exceeding three months. The bill is under discussion in the House of Lords, and the General Medical Council has appointed a committee to report upon the subject with a view to oppose legislation if found necessary.

Impure Ice and Intestinal Disorder.—Dr. A. H. Nichols, of Boston (*Seventh Annual Report of the Massachusetts State Board of Health*), gives a very interesting account of an outbreak of an intestinal disorder in a large hotel at Rye Beach, N. H., due to the contamination of the drinking-water by ice cut from a foul and stagnant pond in the neighborhood.

Dr. John O. Stone, a distinguished practitioner of this city, died suddenly June 6th, in the sixty-fifth year of his age. He was graduated in 1836 from the Medical School of Harvard College; visited Europe, and on his return was appointed a surgeon to Bellevue Hospital. In 1866 Governor Fenton appointed him a member of the Metropolitan Health Board of this city, his colleagues being Drs. Swinburne, Willard Parker, James Stone, and Mr. Jackson S. Schultz, who was President of the Board which had supervision of the Metropolitan District, comprising New York, Kings, Westchester, and Richmond counties, and part of Queens county. He retained his office until the Board was abolished in April, 1870. He was an exceedingly active and prominent worker in his position, and aided greatly in the introduction and carrying out of valuable sanitary measures, especially those relating to the ventilation and cleanliness of tenement-houses.

Sudden Death of Dr. J. V. P. Quackenbush, of Albany, N. Y.—John Van Pelt Quackenbush, of Albany, died suddenly June 8, 1876, at the age of fifty-seven years. He had been suffering for some time with symptoms of Bright's kidney and aneurism of the arch of the aorta, and was so much worn down in consequence that he temporarily relinquished his practice to spend the winter in the South. He returned to Albany in April, and feelingso mewhat stronger, resumed his practice. At noon of the day of his death he started in his buggy to make his professional calls, and when but a short distance from his office he suddenly exclaimed to his nephew, who was driving by his side, "Take care, John!" and immediately afterwards expired. Dr. Quackenbush was born in Albany, June 3, 1819, and was a descendant of one of the oldest Dutch settlers of that city. After receiving his baccalaureate degree from Williams College, he entered the Albany Medical College, graduating from that institution in 1842. Two years later he united himself with the Albany County Medical Society, of which, up to the time of his death, he was an honored and efficient member.

A careful student and indefatigable worker, he soon took a high rank among his brethren, and it was not long before he attained the object of his early ambition, the Chair of Obstetrics in the Albany Medical College. This position he held for a number of years, with great acceptability to the students and his confrères. In 1852 he was chosen President of the County Medical Society, a position which he filled with the ability and zeal for which he was noted. In 1868 he was elected President of the State Medical Society, the duties of which were executed by him in an equally acceptable and creditable manner. Another important public position held by him was that of Surgeon-General of the State under Gov. Seymour during the war of the rebellion.

He married Elizabeth Wright, daughter of Hon

Deodatus Wright. They had one child, Louisa, who was married to Lieutenant Davis of the United States Army, about a year ago, and who resides in Washington. Mrs. Quackenbush survives her husband.

At the time of his death, besides the professorship of obstetrics in the Albany Medical College, he held the positions of Attending Physician to the Albany City and St. Peter's Hospitals. For the past twenty years he has been a member and officer of the Second Reformed Church. He was regular in his attendance at divine worship and was a practical and consistent Christian. The immediate cause of his death is supposed to have been the bursting of the aneurism. Dr. Quackenbush possessed an eminently social disposition, which, combined with his remarkable cordiality, his lively humor, his high integrity, and his professional accomplishments, caused him to be loved and respected by all who enjoyed the privilege of his acquaintance. As a speaker he was eloquent and persuasive, and on more than one occasion his voice turned the tide of angry debate and secured a vote in favor of his side of the argument.

The Albany County Society, on hearing of his death, called a meeting at the Common Council Chamber. Dr. C. A. Robertson, after some introductory and eulogistic remarks, offered the following resolutions, which were unanimously adopted:

Whereas, This society has heard with surprise and profound regret that Dr. John V. P. Quackenbush, one of its most esteemed and influential members, has been suddenly cut off by death; therefore,

Resolved, That while we deplore the loss of a physician of his eminent knowledge and skill as a public calamity, we likewise painfully lament his decease as that of a kind-hearted associate, a discreet and valuable counsellor, and an honored gentleman.

Resolved, That we attend his funeral in a body, and that we wear the usual badge of mourning.

Resolved, That we deeply sympathize with his bereaved family and relatives, and that a copy of these resolutions be transmitted to his family by the secretary of the society, and also be published in the daily papers.

Remarks were also made upon the character and worth of the deceased by Drs. J. S. Freeman, Vanderveer, Bigelow, J. L. Babcock, and W. H. Bailey, after which resolutions were adopted to attend the funeral in a body.

Association of American Medical Editors.—The third annual meeting of this association was held at Philadelphia on the evening of June 6, 1876. The annual address was delivered by Dr. A. N. Bell, the President of the Association, the subject being "The Relation of the Medical Editors to the Medical Profession of the United States." In the course of his remarks he expressed the opinion that the present methods of medical instruction were so deficient that, far from advancing the interests of the profession, they were eminently calculated to promote downright quackery. To sustain this view, he quoted from announcements of medical colleges to show that the process of cramming in most of the institutions gave the student but a mere smattering of the subject gone over in the various lectures. Inasmuch as modern medicine had expanded beyond the bounds of any individual comprehension, subdivision in its study had become no less essential for its cultivation than for its practice. The specialties of a few years ago had become departments, and the attempt on the part of the professors and teachers to continue to explain the whole of the sciences now embraced in medicine to students within the brief space of time commonly allowed, had not only resulted in utter failure, but in the degradation of the profession. Referring to the report of the Commissioner of Education of the United States, he stated that the total number of schools of medicine, dentistry, and pharmacy reported to that officer for 1874, was 99; the number of instructors, 1,121; students, 9,095. Of these 9,095 students reported, 733 only were shown to have received a degree in letters or science (omitting any account of 59, out of the whole 99 institutions, which had failed to make any report on this point); and five expressly stated that in their classes there were no college graduates. The total number of volumes in the libraries of these schools, so far as appears from their reports, was only 66,611; from 44 there was no response to questions under this head, and one distinctly reported that it had none.

In conclusion, he said that medical editors had no need to wait for ceremony in the discussion of the question. Their liberty and their duty was to expose existing abuses, and, if possible, render them so odious as to make their reform a necessity.

At the close of the address a discussion was entered into in the interest of reform in medical schools. Dr. Parvin, of Indianapolis, offered a resolution expressive of approval of the preliminary course and the graded course of three years, with the stated examinations as carried out in some of the colleges, which was adopted.

The following officers were elected for the ensuing year: President, Horatio C. Wood, M.D., editor of *Philadelphia Medical Times;* Vice-President, W. H. Byford, M. D., editor of *Chicago Medical Examiner*, of Chicago; Permanent Secretary, Frank H. Davis, M.D., of Chicago.

Medical Associations in Sweden.—There are five distinct medical organizations in Sweden, which are in active and prosperous condition. The most important of these is the Medical Society of Stockholm, which meets once a week, has a large and influential membership, among which may be counted the faculty of the Caroline Medico-Chirurgical Institute. Professor E. Odmansson is the President. This association publishes not only its transactions, but also *The Hygeia*, which for a long time has been the only medical journal of the country. The Medical Society of Upsala, with Professor P. Hedenius as President, consists chiefly of the members of the faculty of the University of that place. This association, which is quite an active one, publishes its transactions in bimonthly parts. The Military Medical and Surgical Society, whose head-quarters are at Stockholm, was formed last year, and has Dr. Edholm as President. It has commenced publishing a Journal of Military Surgery, which is largely made up of the transactions of the association. The Medical Association of Gothenburg has a good and influential membership, but publishes neither journal nor transactions. The President is Dr. E. Salén, of Gothenburg. The Royal College of Health, at Stockholm, is considered to be the highest medical authority of Sweden, and has the entire medical faculty of the country under its control.

Compulsory Vaccination.—The Registrar-General of Scotland urges that the vaccination act should be amended so as to reduce the period of six months, during which an infant must be vaccinated, to four months.

Hôtel Dieu.—The new Hospital of Hôtel Dieu will probably be opened early next year.

Transverse Fracture of Patella from direct Violence.—Dr. J. H. Crawford, of Wiscasset, Maine, writes: "Noticing a case of direct fracture of the patella chronicled in reports of practice of Bellevue, I would wish to state that I have had a somewhat similar one. Miss Julia, of Metuchen, N. J., while stepping from a platform to the railroad track, slipped and fell, striking her right knee against the rail. She was conducted home, and when I saw her, the same day, I found transverse fracture of patella, with considerable displacement. I used a stimulating lotion, and the following day drew the fragments of bone together, retaining them with strips of adhesive plaster, enclosing the whole leg at oblique angle, retaining it in this position for six weeks, at the expiration of which time I commenced free motion of joint with satisfactory results. At the expiration of nine weeks the patient, for the first time since the fracture, stood on her leg, and finally had a comparatively perfect union, with free use of joint as before the fracture.

Treatment of Diphtheria.—Dr. S. H. Moore, of Syracuse, N. Y., claims considerable success in the treatment of diphtheria by the internal administration of iodine. He uses the following:

℞. Tinct. iodini ..... ʒ iv.
Sacch. alb. ..... ʒ iij.
Aquæ ..... ʒ iv.
M. Cap. ʒ i. q. ½ hor.

He writes: "I had during January and February thirteen cases, and in all of them I pursued the same plan of treatment. All the cases turned out successful, not one dying. The effect of the iodine seemed to prevent the formation of the membrane. It also prevented the swelling of the glands of the throat, and seemed to stimulate the patients, as in no one of the cases cited was there the great loss of strength that we usually find in diphtheria. The above formula is pleasant to the taste and can be retained on the most delicate stomach. The mixture at first is of the color of iodine, but during from six to twelve hours becomes almost as transparent as water."

Some Forms of Dyspepsia.—Number 16 of the *Series of American Clinical Lectures* contains an excellent article on "Some Forms of Dyspepsia," by Dr. Francis Delafield, of this city.

Chloral in Labor.—M. Polaillon maintained, at a recent meeting of the Société de Médecine, of Paris, that chloral was of use in merely combating irregular contractions, and that in general, instead of allaying pain and permitting delivery, it only relieved suffering by arresting labor.

Proportion of Medical Men to Population in England.—In the English army there is one surgeon to every 202 men, in the general population only one medical practitioner to every 1,276 men, women, and children. At the census of 1871 the number of physicians and surgeons was 14,684, under-graduates and assistants 3,116. In this country there is on the average about one physician to 500 patients, and yet we are told that there is abundance of room for the annual crop of graduates.

Drugging of Animals.—A bill has been presented to the English Parliament making it a penal offence on the part of grooms to administer poisonous drugs to horses without the knowledge of their masters. This will tend to break up a long-established and pernicious practice in Great Britain.

Epidemics of Typhoid.—The epidemics of this fever, occurring in different parts of Great Britain, are found to be due to polluted drinking-water, and its admixture with milk.

The late Dr. Parkes.—At a meeting of Army Medical Officers, held at Netley, it was decided that a memorial portrait of the deceased be hung in the mess-room of the school.

Compulsory Information of Infectious Diseases.—The Medical Society of Huddersfield (Eng.) have voted that "It is oppressive, unnecessary, and unjust that it should be made a penal offence for a medical man to fail to report the existence of infection."

Charrière.—Joseph Frederick Charrière, the founder of the great Parisian manufactory of surgical instruments, died recently of cerebral hemorrhage, in the 74th year of his age. He was born in the Canton of Fribourg, in Switzerland, went to Paris at the age of twelve, and six years later became the head of a small surgical instrument business. He began at once to attend the clinics and the operations at the various hospitals regularly, and by his skill, industry and evident desire to please, soon attracted the attention and won for himself the esteem and friendship of the prominent surgeons of the time, among others, Dupuytren, who was ever after his firm friend and counsellor. His business grew rapidly, and, instead of the forty workmen whom he employed in 1833, when he moved his factory to the *rue de l'Ecole de Médecine*, his house now gives employment to two hundred. His fame as an instrument-maker spread to all quarters of the globe, and since 1833 his instruments have taken the first prizes in countless expositions, both national and international. In 1851 he was judged worthy of the highest award at the Exposition of London, but was deprived of his prize by the narrow-mindedness of the English jury. On returning to Paris, he was recompensed for this injustice by the Cross of Officer of the Legion of Honor, which was conferred on him by the French government. M. Charrière was in his branch the foremost artist in Europe. To him we owe the present perfection of many of our most useful instruments, and, in fact, to his inventive genius are we indebted for many of the instruments themselves. He was also the first to construct the two-bladed lithotome, and without him the lithotrite might be still a dream. He was the first to substitute steel for iron in the manufacture of the instruments used in operations on the bladder. Scores of instruments that are now in daily use were improved, made lighter, stronger, more compact, and more portable by him; and for these improvements as much as for his inventions, the medical profession owe him undying thanks. Through them, not only has the skill of the surgeon been increased, but he has actually been enabled to attempt and perform hitherto impossible operations, while at the same time the sufferings of the patients and the risks of surgical intervention were greatly diminished. The work of this man was great, and its traces will long be met with. His pupils are to be found in every country, and the models of his instruments, after forty years of use, have undergone but a few unimportant modifications. He deserves to be classed with the saints of the surgical calendar, and his name should be inscribed beneath those of Lisfranc, Dupuytren, Velpeau, Malgaigne, Nélaton, Récamier, and a host of others who have honored him with their friendship and their advice.—*Progrès Médical.*

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, June 1, 1876.

DR. S. S. PURPLE, *President, in the Chair.*

ON INCISION AND DISCISSION OF THE CERVIX UTERI.

DR. E. R. PEASLEE read an exhaustive paper upon the above subject, in which he referred to the operation of incision as performed by Simpson, discission as performed by Sims, the operation which he himself performed, and the immediate and remote effect following the three varieties.

By *incision* was meant simply cutting into the substance of the cervix, while by *discission* was meant severing the cervix, or cutting through it entirely.

Dr. Peaslee employed the general term *trachelotomy*, and under that head considered the methods, the uses, the abuses, and the true value of the operation, and then explained his own method, which he believed not to be liable to the objections applicable to the operation as originated by Simpson and Sims.

As long as trachelotomy must be recognized in the treatment of stenosis of the cervix uteri, the least objectionable method, of course, should be preferred. The two methods authoritatively practised were: 1, Simpson's, or deep incision of the cervix; 2, Sims', or discission of the cervix; and 3, he added the superficial incision of the cervix, or his own operation.

First, with reference to

SIMPSON'S OPERATION:

Prof. Simpson, believing that the stenosis was most commonly found at the internal os, devised a metrotome, with which he made incisions for its removal. Dr. Greenhalgh subsequently devised an instrument for the same purpose, which was regarded as more perfect than Simpson's, because it cut more symmetrically, but at the same time cut more extensively, which was decidedly objectionable. Simpson's operation became very common, but Greenhalgh's instrument had generally been preferred. Indeed the operation became so common that, at last, it had been resorted to where no stricture was present.

The doctor then proceeded to consider the immediate and remote effects of the incision of the cervix uteri, and it was maintained that by the operation the shape, size and normal relations of the cavity of the cervix to the cavity of the body were at once changed. In some cases fatal, and, in many, profuse hemorrhage had occurred; in others pelvic cellulitis and septic peritonitis had been developed, which had proved fatal. Dr. Peaslee was surprised that such results had not followed the operation far more frequently. For, by the use of Greenhalgh's instrument, when the small incision was made, the wall of the cervix was cut more than one-half through upon both sides, while the large incision went so near through into the peritoneal cavity, that the least inclination of the uterus or the instrument, or a less thickness of the cervical wall than normal, would permit the blade to cut entirely through with the greatest ease.

In all cases in which the operation has been fully resorted to, the form and size of the entire uterine cavity, both corporeal and cervical portion, had been entirely changed, and instead of being of the shape of a flattened hour-glass, the constricted point at the internal os, it has been made bottle-shaped, with the bottom of the bottle knocked out.

Such a cavity might receive menstrual fluid from above, and seminal fluid from below, but it could not retain either. According to Sims, said Dr. Peaslee, the operation cuts altogether too extensively, but the same objection, it was maintained, also held good against Dr. Sims' operation. The immediate dangers, therefore, were hemorrhage, pelvic cellulitis, and septic peritonitis. No statistics concerning the immediate effects had been published, as they should have been.

Dr. Peaslee then noted Barnes' objection to Greenhalgh's instrument, and also cited the history of a case in which Simpson had performed his operation for the cure of sterility, when stenosis or displacement was not present, and a nearly fatal hemorrhage ensued.

But the remote effects of the operation were not to be overlooked. Admitting that dysmenorrhœa was dependent upon stenosis, what could be expected in the way of utero-gestation with a uterus that had thus been maimed? The seminal fluid could not be retained, and should conception accidentally take place, gestation would be brought to an end prematurely. The operation was seldom followed by conception, the doctor maintained; but when it did occur, abortion was the rule. And if closure of the wound occurred, the woman was not so well off as before the operation, because more or less induration would follow and might increase, and although the dysmenorrhœa might be relieved, the probability of conception and utero-gestation to the end of term was diminished. Sims had objected to the operation because eversion of the labia uteri followed; but it was claimed that the same objection held good against his own operation.

With reference to the uses of the deep incision, it could not be recommended for sterility, since it often prevented conception and favored abortion. It, however, relieved, and might cure dysmenorrhœa, if dependent upon obstruction, though the tendency, if the wound closed, was to increase the very condition for the relief of which the operation was performed.

Dr. Peaslee rejected the operation for the relief of dysmenorrhœa even when depending on stenosis, and condemned the metrotome of Greenhalgh altogether. Simpson's instrument might be useful for making incisions in the cervix to aid the removal of uterine fibroids, but under no other circumstances would he recommend it.

SIMS' OPERATION.

2. Attention was next turned to *discission* of the cervix uteri, or SIMS' OPERATION. It was first practised in January, 1857, and consisted in completely severing with scissors the wall of the cervix, upon both sides, up to the vaginal junction, after which a narrow-bladed knife was introduced into the cavity of the uterus, and the internal os divided, as thought necessary, and the opening through the canal enlarged, which had remained intact after using the scissors. Dr. Peaslee argued that by Sims' operation the cervix was annihilated for all practical purposes, and that the shape and size and value of the uterine cavity was usually destroyed. The immediate effects, therefore, of the operation, were change in the form and size of the uterine canal, frequently alarming hemorrhage, sometimes pelvic cellulitis, and septic peritonitis, which was almost invariably fatal when it occurred. The fact that the cervix was severed completely to the vaginal junction rendered the operation more dangerous, as far as hemorrhage was concerned, than Simpson's. Dr. Peaslee had known of four cases in which fatal hemorrhage followed Sims' operation, and believed that cellulitis and peritonitis were much more likely to follow Sims'

than Simpson's, because of the greater surface afforded for the absorption of any septic material. The doctor believed that, if all the fatal cases which had followed the operation had been published, the list would be startling, and it would hardly seem necessary to state that the life of the patient should not be thus jeopardized without the greatest necessity. Yet the history of two cases was selected in which the operation had been performed; but why, Dr. Peaslee was unable to tell. For, in the first instance, the woman was a maiden lady over fifty years of age, had never had dysmenorrhœa, and it was scarcely possible that it could have been done for the relief of sterility. In the second case, there was no dysmenorrhœa or constriction of the cervical canal, and it could hardly have been done for the relief of sterility, because the woman had been married only five months.

Such facts could be explained only upon the ground of a MANIA which practitioners sometimes had for performing special operations. The change produced by Sims' operation it was believed would usually relieve the dysmenorrhœa if dependent upon constriction, but it would probably prevent conception, and, if impregnation should take place, abortion would almost certainly follow. Dr. Peaslee maintained that, when such complete incisions through the cervical wall were made, they should be treated the same as rupture of the cervix in parturition, and closed as soon as possible. It was remarked that discission had been performed for the cure of flexions of the uterus, but such an operation for such a purpose was regarded as something like dividing the sphincter ani muscle for the sake of affording relief to a constriction in the sigmoid flexure of the colon. Such an operation could do nothing for the relief of a flexion except to relieve the congestion, and that would be much more safely accomplished by the application of a half dozen leeches.

Dr. Peaslee referred to the sagittal incision recommended by Sims for anteflexion, and endorsed by Barnes. It was performed by dragging the posterior wall of the cervix as low down as possible, and then slitting it up to the vaginal junction, after which a narrow knife was passed into the canal and an incision made, so as to bring the cut exactly in a line with the axis of the cavity of the uterus.

If that could accomplish all it promised, there was a better way to bring it about, said Dr. Peaslee; and then added that the operation in anteflexion was impossible; never had been and never could be performed. There was also an insurmountable objection to the performance of the operation for displacement; since, even if it could be accomplished, it ignored the very first indication in the treatment of all displacements, viz., to restore the uterus to its normal position. An incision made in the manner referred to, for the purpose of replacing a uterus, first of all left it in its malposition. But the operation did not effect what had been proposed, because in that condition of the uterus its performance was absolutely impossible. For the axis of the cavity of the cervix met the axis of the cavity of the body at an angle of 165°, and a continuation of the line of the axis of the cavity of the body would bring it through the cervical wall nearly to the vaginal junction when the uterus was in its normal position.

Now let the body of the uterus fall forward a little, and it was found that the line of the incision, being a continuation of the axis of the cavity of the body, went through into the peritoneal cavity. In the second and third degrees of anteflexion the line would not enter the vagina at all; but, on the contrary, in the third degree at least, would fall pretty well towards the woman's umbilicus.

In all cases of *flexion* or *curvature* of the cervix the operation could be performed, but that was an entirely different state of affairs, and for their relief the operation was a proper one. It should, therefore, be restricted to such cases of curvature and flexion, and never attempted in cases of anteflexion; for, in the latter condition, it never had been and never could be performed.

Dr. Peaslee then referred to the diagrams which had appeared in nearly every work published upon diseases of women within the past ten years, and had passed unchallenged. (They can be found in the last edition of Thomas's work on Diseases of Women, at pages 412 and 413.) From his study of the operation, he had come to regard them as visionary and fallacious.

With regard, then, to discission as a means of cure for sterility and dysmenorrhœa, Dr. Peaslee rejected it; and farther, knew of no condition in which it could be recommended, unless it was employed to assist in the removal of fibroids; and then the unilateral incision was, as a rule, all that was required. No statistics regarding the success of Sims' operation for the cure of sterility alone had been published.

1. Deep incision and complete discission of the cervix uteri were attended by certain immediate dangers, and were productive of certain remote consequences prejudicial to the child-bearing function of the woman. Of those there were profuse, perhaps fatal, hemorrhage, pelvic cellulitis, septic peritonitis, sterility and abortion.

2. Those risks and effects were all due to the extensive division of the walls of the cervix, and the consequent enlargement of its cavity; and with the sole compensation of relieving the symptoms or curing dysmenorrhœa, if dependent upon stenosis.

The question then arose, could such extensive division be so far avoided as to avoid these risks and at the same time remove the condition that predisposed to sterility and dysmenorrhœa?

To answer the question properly, it became necessary to study the calibre of the cervical canal, and determine the size necessary to relieve the dysmenorrhœa and favor conception.

It was laid down that the normal cervical canal in the *imparous* woman was one-seventh of an inch in diameter at the internal os, and one-fifth of an inch in diameter at the external os. The larger size of the external os had reference to conception, and had no special influence against dysmenorrhœa, since the menstrual fluid after passing through the internal os could be conveyed to the vagina without difficulty through a canal of the same size.

In the *parous* woman, the internal os remained nearly twice as large as in the imparous, and was about one-fifth of an inch in diameter, while the external os was increased in size in nearly the same ratio, and was three-tenths of an inch in diameter.

If, therefore, an internal and external os existed of these sizes, the woman would be insured against sterility and dysmenorrhœa. Now, to obtain that size required an incision only $\frac{1}{35}$ of an inch in each direction at the internal os and $\frac{1}{70}$ of an inch at the external os, to convert the ora of the virgin into the ora of the parous woman. Practically, it was believed to be well in some cases to make the incision deeper, but if there was no congestion, the depth of the incision noted was regarded as sufficient. Now, to secure the required calibre of the cervical canal and internal os, Dr. Peaslee, in cases where the stenosis was slight and the cervical canal soft and pliable, had been in the habit of employing a series of steel conical dilators. But about ten years ago he had devised a measure which was more prompt

and less painful than dilatation, and less dangerous than either Simpson's or Sims' operation. The operation consisted in making a superficial incision; it had for its direct object the removal of the stenosis of the cervical canal, and nothing else, and the rules which governed its adoption were embraced in the following propositions:

First, with reference to the *internal os*.

1. If a sound $\frac{1}{8}$ of an inch in diameter passed easily, there was no stenosis, hence no incision was required. One-fifth of an inch in diameter was the size of Dr. Peaslee's largest conical dilator and his large sound.

2. If a sound $\frac{1}{8}$ of an inch in diameter passes, there was no absolute necessity for an incision to relieve the stenosis. But there might be stenosis for the passage of fluid, though not for the passage of a sound; and under such circumstances an incision might be required.

3. If a sound $\frac{1}{8}$ of an inch in diameter passed, and gave no evidence of stenosis, no incision was required.

4. If a sound $\frac{1}{8}$ of an inch in diameter could not be passed, there was present either stenosis, or, what was more probable, one of the flexions. Prove, therefore, in every case, before operating for stenosis, that the obstruction at the internal os, to the free passage of the sound, one-eighth of an inch in diameter, or more, was not due to flexion.

Second, with reference to the external os.

5. If a sound $\frac{1}{8}$ of an inch in diameter could be passed, there was no stenosis. But if there was congestion of the lining membrane of the cervical canal, there might be stenosis, practically with reference to conception, and an operation might be required.

6. If the external os admitted a sound only $\frac{1}{8}$ of an inch in diameter, there was probably stenosis with regard to conception, and an operation might be necessary.

7. In case the operation was performed, it was important to retain the fusiform shape of the cervical canal as far as possible.

Dr. Peaslee then showed his metrotome for the performance of the operation he described.

The incision should be carried only to such an extent as would give the precise average relations of size found in the cervical canal of the parous woman. In cases complicated by congestion, a larger opening might be required, and the limits might extend beyond $\frac{1}{8}$ of an inch in diameter, for the internal os, and perhaps to $\frac{1}{4}$ of an inch for the external os. Dr. Peaslee's operation then consisted mainly in making a *superficial* incision in the cervical canal, sometimes not extending through the mucous membrane, and sometimes a trifle more, as already indicated. It should be performed at least four days after or six days before the catamenial period; and, by preference, the small blade of Dr. Peaslee's instrument should be used, for the calibre of the canal could be easily increased with the dilators, and by so doing the liability of union of the wound was diminished. No anæsthetic would be required, and the amount of hemorrhage seldom exceeded two drachms. He had never known of pelvic cellulitis or peritonitis following the operation, because the medullary portion of the cervix had not been disturbed. His observations were based upon about 300 operations. The woman should be kept in bed for two or three days, and not permitted to walk for a week.

Sometimes it might be necessary to repeat the operation; but, in all the cases where he had been obliged to repeat it, Simpson's or Sims' operation had previously been performed, and the incision had closed. In such cases, the cicatricial tissue was so firm, that repetition of the incision usually became necessary. Nor had the operation been followed by sterility or miscarriages, as had the other operations, and it had very often cured the sterility, and the dysmenorrhœa of stenosis. It was, therefore, an operation that proposed all the advantages of the others, and without their dangers. In conclusion, Dr. Peaslee suggested that both Simpson's and Sims' operations should be rejected for the treatment of sterility and dysmenorrhœa, and that some better method should be employed, of which, perhaps, his own was merely a forerunner.

In the discussion which followed the reading of Dr. Peaslee's paper,

Dr. Fordyce Barker remarked that he believed it to be high time that the subject under consideration was discussed, and that the opinions and practices of the leading gynæcologists of the city should be known and understood. He argued that it would doubtless relieve the profession from some reproach, and vindicate it from a dangerous under-current of belief, that the leading practitioners of the city of New York regarded slitting open the cervix uteri as the grand panacea for all uterine disease, not only for the cure of local troubles, but formed a therapeutical measure for the cure of hysterics, nymphomania and all allied maladies.

In certain cases, doubtless, the operation was required, but as a general thing it was not necessary. About twenty years ago Simpson presented a hysterotome to Dr. Barker, and the first two operations he performed were followed by conception, and the children were carried to term. The next twelve cases were cured of the dysmenorrhœa, but the sterility remained. Since that time the doctor had closely watched professional opinion with reference to the operation, and had also seen patients in an extremely dangerous condition from loss of blood following the operation; and his experience enabled him to verify the correctness of some of the statements made by Dr. Peaslee with reference to the unnecessary performance of the operation.

The operation should never be performed except for stenosis, either congenital or acquired. Acquired stenosis might come from displacement; but there were many cases of displacement which were not attended by either sterility or dysmenorrhœa. Many such patients, however, had been treated for displacement, when no treatment whatever had been necessary. The doctor then related a case, and the woman had had three or four miscarriages since the performance of the operation. Dr. Barker remarked, in conclusion, that he had not performed the operation in a single instance in all his hospital practice, but that he had occasionally performed it in private practice.

Dr. Emmet coincided with the general doctrine advanced in the paper, and also in the remarks made by Dr. Barker, adhering, however, to the view that the operation of discission was proper in cases of flexure and curvature of the cervix.

Dr. Pallen was inclined to the opinion that the operation was justifiable, and much more frequently called for than one might be led to infer from the paper by Dr. Peaslee.

Indiana State Medical Society. The twenty-sixth annual meeting of this Society was held at Indianapolis, May 16th and 17th. The following officers were elected for the coming year: Dr. S. S. Boyd, President; Dr. E. D. Laughlin, Vice President, and Dr. G. V. Wolven, Secretary. In the course of the meeting a resolution was adopted to the effect that no paper be published in any medical journal before its appearance in the Transactions, which we believe is a great mistake.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, May 10th, 1876.

DR. C. K. BRIDDON, PRESIDENT, IN THE CHAIR.

PERIOSTEAL TUMOR OF THE ORBIT.

DR. H. KNAPP exhibited two specimens, taken partly ante- and partly post-mortem, from a patient who had been under his care for the previous three or four months. The patient, a male, aged thirty-six years, who was emaciated and pale, stated that during the war he became affected with syphilis, since which time he was never healthy. There was a stellate scar upon his forehead and a depression in the bone upon the right side of the head, and altogether he presented a cachectic appearance. Two years ago his right eyeball began to protrude, and a year ago his sight began to fail. Then the upper lid commenced to swell at the inner part of the orbit, and finally a tumor began to make its appearance at that point.

In that condition he consulted Dr. K. The exophthalmus was so considerable that the eyeball was almost dislocated forward, and it was only with the greatest difficulty that the lids could be closed. Considerable chemosis present. Pupil movable when other eye closed. Media clear. Fundus showed typical appearance of choked disc. On the inner side of orbit was a soft, uneven, somewhat nodular tumor. Eyeball moved upward and outward, but not inward. The patient complained of considerable pain. Dr. K. advised the removal of the tumor and the preservation of the globe. To this the patient consented. An opening was made through the inner part of the upper lid, the conjunctiva incised, and the tumor exposed. It was found to occupy nearly the whole of the orbit. The globe was easily pushed aside. The inner rectus was detached, and soon afterwards the optic nerve was cut across at the apex of the orbital pyramid. The tumor was found to have sprung from the periosteum, and was removed by scalpel and gouge as cleanly as possible down to the bone. The antrum was open, but seemed to be clean. It could not be made certain that the tumor did not extend into the infra-orbital fissure. At the completion of the operation the ball was replaced, the lids stitched, and an examination made. The whole inner side of the eyeball was insensible. On ophthalmoscopic examination there were found a certain number of retinal veins still filled, notwithstanding that the posterior ciliary arteries were cut in the division of the optic nerve. After the operation the patient did well enough for two or three days, when he complained of headache and obstinate vomiting, which symptoms continued until his death, on the thirteenth day. The examination of urine during life showed only the least trace of albumen. On the third day after the operation an ulcer developed itself on outer half of the cornea. This was quite a remarkable circumstance, inasmuch as the outer half of the eye was sensitive and the inner half not. The inner half of the cornea was perfectly clear, and through it the examinations could be made. The ulcer spread by the fifth day so as to involve the lower part of the cornea, and finally perforated the same on the twelfth day. The fundus oculi showed a somewhat whitish red appearance. Upon the third or fourth day new retinal vessels made their appearance, that is to say, the old retinal vessels were filled again. About the eighth day there was a good deal of retinal venous hyperæmia, and the background began to be reddish again.

Dr. Heitzmann assisted at the post-mortem examination. The brain was normal. The orbit, with contents, were removed from the cranial cavity. Optic chiasm was normal—no evidences of meningitis anywhere. The liver contained a small fibrous gumma, as did also one of the testicles. The spleen was lardaceous. The kidneys very much enlarged and the seats of acute croupous inflammation. The latter was evidently the cause of death.

The microscopic examination of the eye showed that the tumor sprang from the periosteum of the orbit and entered somewhat into the lower orbital fissure The tumor was of a sarcomatous character, and was in connection with the sheath of the optic nerve only at the apex of the orbital pyramid, and at that point the nerve was compressed. The bundles of nerve fibres were filled with sarcoma cells, while the inter-vesicular substance was free from them. This appearance continued not only through the whole extent of the nerve, but also into the cribriform membrane into the eye, filling the intra-ocular end of the optic nerve, and there producing the symptoms of choked disc.

SALPINGITIS, WITH ANOMALOUS SYMPTOMS.

DR. ROBERT NEWMAN exhibited the uterus and fallopian tubes removed from a virgin, aged thirty-two years. During the summer of 1874 she caught "cold," and was attacked with menorrhagia, from which she suffered continuously for fifteen months, during all the time being without treatment. She then consulted Dr. Newman, who tried every means to check the hemorrhage, dilating the uterus with sponge-tents, etc., but without avail. Finally a single application of acetate of zinc and glycerine proved effectual. After the hemorrhage ceased she had transient œdema, first of one lower extremity and then of the other. Her anæmia continued, and she showed no sensible signs of improvement. Dr. Fordyce Barker was called in consultation, but nothing new was discovered in her condition, and the treatment of chlorate of potash, iron, and quinine was continued. She continued to grow weaker, and without any other symptoms finally died.

At the autopsy Douglas' sac was filled with matter, but there were no adhesions, and the intestines were perfectly free. The right fallopian tube was occluded, and its extremity was distended by a cyst the size of a small hen's egg. This occlusion was supposed by Dr. Newman to be the result of inflammation, while the cyst was filled by the accumulation of inflammatory effusions and of menstrual discharges. The kidneys were healthy. The left lung showed that the immediate cause of death had been pulmonary œdema.

LESIONS IN COLLES' FRACTURE OF RADIUS.

DR. E. MASON presented the wrist-joints of a boy, aged twelve years, who had died of fracture of the base of the skull two hours after the receipt of the injury. Both wrists were the seat of Colles' fracture, and the specimens were of interest as showing the peculiarities of the lesion in a recent case. Both radii were fractured, and one wrist looked as if there was also a dislocation of the ulna. The left wrist showed a diastasis of the radius with a comminuted fracture of the epiphysis. The right radius showed a diastasis, with very little displacement. There was no rupture of either of the posterior radio-ulnar ligaments, and there was very little displacement of the triangular ligament. There was no dislocation of the ulna.

FRACTURE OF NECK OF FEMUR AND FALSE JOINT.

Dr. Mason also exhibited the neck and upper portion of the femur removed from a patient who died in the Roosevelt Hospital. The patient was a large, fleshy single woman, sixty years of age, admitted Jan-

uary 26th. She had fallen the day previous and had produced a fracture which was readily diagnosticated as intra-capsular. She was treated in the usual manner, but was seized with meningitis on the 14th March last, and died of the same on the 28th March. The post-mortem examination of the injured hip showed that the neck of the femur was almost entirely gone, and that there had been very little, if any, attempt at reparation. When she was admitted she informed the house-surgeon that twenty years before she had fallen on the other (right) hip and produced a fracture there, for which she was treated. On autopsical examination of this hip the following condition of things was discovered: The head of the bone was loose in the capsule. The neck of the femur had entirely disappeared, and a facet had been formed between the greater and the lesser tuberosity upon which the head of the bone played.

Dr. Mason also exhibited the head, neck, and portion of the shaft of the femur of a colored woman, aged 60 years, showing nature's effort to heal a fracture below the trochanter. The patient during the time of the treatment was suffering from dropsy, due to Bright's disease, and from bed-sores. With great care she recovered from the fracture, but died ten months after from perforation of the sigmoid flexure. The union of the bone was complete, and the usual buttresses existed between the angle of the shaft and neck.

He lastly exhibited a specimen, illustrating the reparative power of nature in uniting a fracture under difficulties. It was a femur removed from a woman aged seventy, who died of pluro-pneumonia forty days from the time of the reception of an oblique fracture.

TUBERCULOUS DISEASE OF TESTES—EJECTION OF PROSTATIC FLUID SIX MONTHS AFTER THEIR REMOVAL.

Dr. Leale completed the history of tuberculous disease of the testicles, specimens of which had been presented to the Society six years ago. The patient was then aged thirty-nine years, and received an injury of one of the testicles by the tilting of a chair upon which he was partially seated. The organ was driven up into the inguinal region, and it was with difficulty replaced in the scrotal sac two hours afterwards. It swelled rapidly, giving him a great deal of pain. He made use of household remedies for two weeks, when he consulted Dr. Leale. Despite of treatment the testicle gradually grew larger, and in the course of a few weeks the testicle of the opposite side became involved. Becoming very much emaciated, and the disease assuming a malignant character, one testicle was extirpated, followed in a few days by the removal of the opposite one. Dr. Delafield found that the glandular substance had been replaced by tuberculous material. The first testicle weighed a little over six ounces, and the second five. After the operation his general health improved and he grew quite strong.

At the time of the presentation of the specimens Dr. Flint asked the question whether there were any evidence of tuberculous disease in the lungs, stating that primary tubercular degeneration of the testicle was very rare. The answer was that there was no such disease of the lung as could be detected at that time.

Six months after the removal of the testicles the patient stated to Dr. Leale that he was able to eject semen during copulation. Dr. Leale expressing his doubts on the subject, the patient stated that he had taken occasion to withdraw, and had ocular demonstration of the fact. On this occasion about half an ounce of fluid was discharged, which was prostatic in character.

The patient had five children previous to the operation.

In relating the circumstance to the N. W. Medical Society, one of the gentlemen present stated that he owned a gelding in which he noticed the same condition one year after castration. After six months the power of ejecting the fluid failed in the patient, he continuing to grow fat and increase in strength. Being the trainer of Weston, the patient exerted himself beyond his powers of endurance, the result of which was exhaustion, followed by anasarca, from which he never recovered.

At the autopsy tubercles were discovered at the upper portion of each lung, and in the substance of the kidneys, liver, and spleen. The pancreas was almost entirely destroyed by the disease, and was adherent to the surrounding parts. Dr. Leale had no doubt that the deposits in the testicles were of a secondary character to those in the lungs, although the small amount of disease in the latter, and the absence of symptoms pointing to the same, made a diagnosis uncertain.

COPPER COIN IN INTESTINAL CANAL FOR SEVEN WEEKS—FINAL PASSAGE OF THE FOREIGN BODY PER ANUM.

Dr. Leale also presented a specimen, which was a copper coin 2⅝ inches in circumference which had been swallowed by a girl three and a half years old, and retained seven weeks in the alimentary canal. At first the foreign body was lodged in the upper part of the œsophagus, but in efforts at extraction with a probang it was pushed into the stomach. About four days after, Dr. Leale believed that he detected the coin in the right ilio-cœcal region. Here it remained for five weeks, giving rise to frequent attacks of pain and of violent tenesmus. At the end of this time the patient almost fainted while at stool. The mother thought that the penny had passed, but on examining the discharge found that she was mistaken. According to the mother's statement of the child's symptoms, and the seat of pain, the coin must have become lodged in the rectum, just above the sphincter. Finally, two weeks after, the foreign body was discharged in a hardened stool. It is unnecessary to state that during the time that the penny was supposed to have been lodged in the rectum Dr. Leale was not in attendance upon the case, and hence the child was unrelieved until the occurrence of the stool in question.

Dr. Mason remarked that it was not unusual for geldings and oxen to discharge prostatic fluid six months after castration, and that eunuchs were sometimes enabled to do the same thing. In most cases of castration the penis was apt to grow disproportionately large.

EXSECTION OF WRIST-JOINT FOR CARIES.

Dr. Briddon presented carious bones removed by the operation of exsection of the wrist joint. The following was a history of the case:

Wm. G. Harrison entered the Presbyterian Hospital (service of Dr. Briddon), April 19th, 1876. He is thirty-nine years old, a deaf-mute, married, cooper by occupation, and a man of temperate habits.

Previous history.—A tumor made its appearance on the back of his right hand three years ago. It was painless, and grew slowly, and was probably ganglionic in character, as he states that in October, 1875, attempts were unsuccessfully made to rupture it. It was subsequently removed by a cutting operation, and whilst recovering from the effects of this he fell and sprained his wrist; this was followed by swelling of the hand and forearm, which necessitated the use of incisions, which discharged for a long time. Patient

then entered a hospital, where he remained from Oct. 28th, 1875, until April 16th, 1876, when amputation was proposed and rejected.

Present condition.—General health good; his right hand is swollen, fingers extended, stiff, and incapable of motion; concavity of palm effaced, and on its surface are the openings of two fistulous tracks that communicate with carious bone; there is very slight motion at the wrist-joint, none at the metacarpo-phalangeal and phalangeal articulations; all the anatomical points are masked by hard brawny infiltration. Believing, with Professor Lister of Edinburgh, that any partial removal of the bones involved would only lead to progressive destruction of the remainder, the operation devised and advised by that gentleman was proposed and accepted by the patient.

Operation, April 27, 1876, in presence of the Staff and Class.—An incision was commenced over the middle of the back of the second metacarpal bone; it was carried upward in a line with that bone to the carpo-metacarpal articulation, and then midway between tendons of thumb and index as high as the inferior border of the radius; the tendons of the thumb were drawn outwards, those of the common extensor inwards, the knife being kept in close contact with the bones. Then an incision was made on the inner border of the hand, reaching from two inches above the styloid process of the ulna to the middle of the metacarpal bone of the little finger; these incisions permitted all the soft parts to be separated from the bones on both palmar and dorsal surfaces, and gave abundant room for completing the subsequent steps of the operation, and in this dissection it was found that the os magnum had disappeared entirely, and that the contiguous bones were carious and more or less fused by anchylosis. All the carpal bones, the basis of the metacarpal, the inferior articulating surfaces of the radius and ulna, were removed; the cartilages of the latter were intact; but, in consonance with the views of Lister, they were all carefully removed. No tendons were injured save those inserted into the carpal bones themselves, and after removal of Esmarch's bandage, which had been used during the operation, it was not found necessary to apply a single ligature.

Dressing.—A long dossil of lint was allowed to traverse the centre of the cavity; a few interrupted sutures at either extremity of the incisions, and a straight splint.

28th.—There has been but very inconsiderable oozing, which was controlled by elevation of the limb. Swelling slight, reaction moderate, and general condition good.

29th.—Two yards of lamp wick were placed in a vessel containing weak solution of carbolic acid suspended over the limb; one end of this wick was carried through the wound from side to side, and thence over the edge of the bed so as to insure effectual irrigation of the part, and the parts were enveloped in a solution of the same. These precautions were deemed more advisable, inasmuch as erysipelas had developed in a patient in the same ward who had been subjected to a rhinoplastic operation.

May 1st.—Patient is in excellent condition; traumatic fever has entirely subsided; his tongue is clean and appetite is good; locally everything looks promising; there is very little swelling, and the drainage is effectual.

May 10th.—Everything has done remarkably well; the limb, or rather forearm, is one inch shorter than its fellow, and the parts involved are consolidating; distance between truncated radius and ulna and metacarpal bones is about an inch and a quarter; a drainage tube traverses the part, and the limb is supported on a Palmar splint, reaching from the elbow to the ends of the fingers, with a hinge opposite metacarpo-phalangeal articulation, which permits the digital portion of the splint to be dropped to permit of passive movements.

A CASE OF MORBUS COXARIUS, SHOWING THE VALUE OF EARLY OPERATION.

Dr. A. B. Crosby presented the hip-joint of a patient who had died of hip disease, for the purpose of showing what nature would sometimes do for such cases.—Anchylosis had taken place, and the other evidences of the disease, having advanced to the third stage, were present. The result of a careful examination on the part of Drs. Sayre and Crosby created the opinion that the disease was practically cured, and excision was not advised. Notwithstanding, however, every effort to improve the general condition of the patient, he sank and died.

At the autopsy the anchylosis was found almost complete. The tissues surrounding the joint were apparently healthy, but there were two or three distinct openings communicating with it. One of these, on the outer and external portion of the joint, passed in front of the anterior inter-trochanteric line, the pus from which burrowed three or four inches downwards, discharging itself on the inside of the thigh. Another opening was found on the roof of the acetabulum, through which a great deal of pus had escaped, the greater part of the discharge finding its way into a pocket beneath the pubes capable of holding three or four ounces. In order to show the condition of the interior of the joint, a button of bone was removed from the anterior surface. On removing the plug and looking into the cavity of the joint, a portion of the carious head of the femur was seen, separated but firmly imprisoned. Here then was a case which, left to nature, ended in death, but which the removal of the dead bone would have cured.

In remarking upon the general treatment of morbus coxarius, Dr. Crosby said that the disease was the most manageable of any which the surgeon might be called upon to treat. The time when the operation should be performed was, in his opinion, as soon as the head of the bone had become carious.

Dr. Sayre stated that his experience had proved to his satisfaction that cases of hip disease, when left entirely to nature, resulted in shortened and deformed limbs, with more or less anchylosis.

SARCOMA OF THE LARYNX, PHARYNX, AND NARES—TRACHEOTOMY—DEATH.

Dr. Delafield presented the larynx, pharynx, and portion of the tongue removed post-mortem from a woman aged 67 years. She was admitted in Roosevelt Hospital, March 2d. Four months before, the cervical glands of right side commenced to enlarge; soon after which a small tumor made its appearance on the right side of the tongue, gradually extending over its base, and involving the whole of the pharynx and posterior nares as far as could be seen. Dr. Weir removed a portion of the growth on the 7th of March. During the administration of ether the patient came so near choking to death that tracheotomy was performed. She recovered from the operation, but on the 13th of March she was attacked with bronchitis, and died on the 24th.

At the autopsy it was found that the base of the tongue, the entire wall of the pharynx, the posterior nares, and part of the epiglottis, were involved in a

new growth, which also infiltrated itself into the soft tissues of the neck and cervical glands. The lungs were the seats of lobular hepatization of a gangrenous character, besides showing distinct gangrenous spots which were probably caused by the inspiration of gangrenous portions from the tumor of the mouth. Although presenting the clinical history of epithelial cancer, it contained no epithelial elements whatever. Its structure was sarcomatous and resembled that variety which have their origin in the lymphatic glands. Dr. D., in conclusion, stated that he had never seen a tumor of that structure growing exactly in that way in this region, nor did he know of any.

Dr. Heitzmann remarked that he had seen a similar case.

Dr. Robinson referred to the case of sarcomatous tumor of the larynx which he had already reported to the Society, and which was the only one of its kind on record.

Progress of Medical Science.

On the Accessibility of the Duodenum to Operation.—Dr. Braune has come to the conclusion that the so-called vertical part of the duodenum is accessible to operation from behind, to the entire avoidance of the peritoneum, which it is known only partially covers the anterior surface. The experiments and observations, which he details, were made upon bodies carefully hardened by chromic acid and alcohol injections, and by freezing. He states that, as a rule, the right kidney stands somewhat higher than the lower end of the perpendicular portion of the duodenum, and that the lower and inner wall of this portion is behind the peritoneal sac. He performs the operation on the cadaver as follows: The body, being turned face downwards, an incision is made from the region of the posterior superior spinous process of the ilium, above and close to the right of the median line, to above the twelfth rib. The muscles are divided successively until the sacro-lumbalis is reached. This being pulled aside toward the median line with hooks, the quadratus lumborum appears, and must be split through. Hugging the vertebral column, the lower border of the right kidney is made free, the twelfth intercostal nerve and artery are cut across, the ureter and inferior vena cava pressed to the inner side, and the kidney upwards. The intervening connective tissue being now separated with forceps, the wall of the duodenum on the median side can be recognized, when an incision about two inches long may be made in it.—*Archiv der Heilk.*, May 1, 1876.

Salicylic Acid and Oil of Thyme.—Dr. E. Bälz, of Leipsic, assistant to Prof. Wunderlich, emphasizes the following points regarding the administration of salicylic acid and the oil of thyme: The former, especially in women, may give rise to various symptoms referable to the nervous system, notably excitement and jactitation. It is a decided diuretic. Sweating may be absent, even when its anti-febrile action is most marked. It is no prophylactic against fever. Its effects are usually marked in acute articular rheumatism, though it may not prevent relapses. The salicylate of soda may be given hypodermically in solution, but its administration is very painful. The oil of thyme cannot take the place of salicylic acid, as it has the disadvantages of the latter and not its good qualities, and is also very expensive. Its febrifuge action is no more certain, in equal doses, than that of salicylic acid. On the other hand, its taste and smell are very distasteful to most persons. It tends to produce diarrhœa, and in sensitive persons disagreeable symptoms referable to the nervous system, similar to those of salicylic acid.—*Archiv der Heilk.*, May 1, 1786.

The Operative Treatment of Meteorism.—Prof. Fräntzel, of Berlin, in the *Charité Annalen* for 1874, discusses the subject of operative relief for meteorism, where it reaches such a degree as to be dangerous from diminished respiratory capacity, and from over-distention of the intestinal walls. He has practised puncturing the intestine with an exploring needle in ten cases, doing it from two to seven times in several of them. Of these cases, two died from peritonitis referable to the punctures, and one from laceration of the intestine, starting from the seat of puncture, and allowing the escape of fæces. He therefore concludes that this practice is not allowable, except in cases where peritonitis already exists.—*Centralbl. f. Chir.*, No. 17, 1876.

On Massage.—Dr. Von Mosengeil, of Bonn, at the close of an extended article on the Practice of Massage, gives this estimate of its availability in surgery. Its value must be recognized, though the best results will be obtained by the few who will bring to its use abundant time, patience, skill and strength. It is not adapted for every-day use by every physician, nor will it be much used in hospitals, from lack of time. Specialists, therefore, will probably get the most satisfactory results from it.—*Archiv f. Klin. Chirurg.*, xix. 4, 1876.

Cancer of the Testicle in an Infant.—A healthy child, eight months old, was recently brought to M. Depaul on account of a solid cylindrical tumor situated in the left side of the scrotum. It was continuous with the cord, and measured 1½ inches in length by ¾ inche in width. The skin was movable over the tumor, and there was no effusion into the tunica vaginalis. There was neither pain nor tenderness. Soon afterwards the skin of the scrotum became red and adherent to the tumor at one point, where later on an abscess opened spontaneously. Through the fistulous opening about one-third of the tumor escaped and formed a hernia. Castration was performed without an anæsthetic, when the child was ten months old. The operation was easily performed; the cord was rapidly divided by an écraseur, and there was neither primary nor secondary hemorrhage. Fifteen days after the operation the wound had almost entirely cicatrized. The tumor, immediately after the operation, presented a wrinkled appearance in the part involved in the hernia, but was smooth in the rest of its extent. On section it presented a yellowish white color, and a cancerous juice was obtained by scraping. Microscopical examination proved it to be a cancer, but of a mixed composition; in one part it was sarcomatous, while the greater part was scirrhous.—*La France Médicale*, May 13, 1876.

Gastrotomy.—The Record has already published a notice of M. Labbé's operation for the removal of a fork from the stomach of a man, but a few additional points may be interesting to our readers. The operation of gastrotomy has now been performed nine times for the removal of foreign bodies, and in all nine cases it has been successful. On the other hand, it has been performed nineteen times for cancer of the œsophagus, and three times for traumatic stricture of the œsophagus, and in all these cases ended fatally within a period varying from a few hours to twelve

days. In a great many of these cases there was no peritonitis, but probably in all the operation had been delayed until the patients were in the last stages of exhaustion and cachexia.

M. Labbé, previous to his operation, made many dissections to determine the point of election for the incisions. He found that the great curvature of the stomach never ascends higher than a transverse line drawn between the cartilages of the ninth ribs. The end of the cartilage of the ninth rib is situated immediately above the first depression that is met with on passing the finger downwards along the border of the false ribs. This depression is bounded below by the movable cartilage of the tenth rib, which gives rise to a peculiar crepitus when moved. Having settled these points, M. Labbé made his incision parallel to, and half an inch to the inside of the edge of the false ribs on the left side. The incision was 1¾ inches long, its lower extremity falling upon the transverse line between the cartilages of the two ninth ribs. The rectus muscle was not cut, and the stomach was opened at the junction of the cardiac and pyloric portions.—*Gazette Hebdomadaire de Méd. et de Chir.*, May 8.

Salicylic Acid in Acute Rheumatism.—Three articles appear in the *Boston Med. and Surg. Journal* upon this mode of treatment. Dr. Towle reports seven cases. In one, a man twenty-seven years of age, who had been suffering three weeks from acute rheumatism, salicylic acid was given in ten-grain wafers, every hour, until seven powders were administered. He then became so excited and delirious, with no improvement of the rheumatism, that the medicine was discontinued. In another case, the same dose was given every hour, until the patient had taken two drachms. After the seventh powder was taken, the swelling and pain had sensibly subsided. After the ninth dose there was a great deal of buzzing in the ears. Twenty-four hours after the commencement of the treatment, all the symptoms had disappeared, and active motion of the affected part caused no pain. The dose given in all his cases depended upon the age and general condition of the patient. From his experience he thinks that salicylic acid is of decided value in acute rheumatism; and the more acute the case, the more certain the success by using it in full doses. Dr. Huse gave to a man of thirty, the subject of repeated attacks of acute rheumatism, two grains of salicylic acid in sugar every hour for about twelve hours, when the pulse fell below 100 and the joints became more mobile. Two grains of the acid were then given every two hours. The treatment was continued until one drachm had been administered. Three days after the attack, the patient was walking the streets, the rheumatism having disappeared. Dr. Hodgkins reports a case of a young woman who had a severe attack of acute rheumatism in the left knee; where he commenced with five grains of the acid every two hours, which amount was repeated the next day every hour. On the fourth day she was well, and able to walk about without any stiffness or pain. There was no nausea, but when the dose was increased to five grains an hour there was some dizziness, profuse perspiration, and an increased flow of urine.—*The Boston Medical and Surgical Journal*, May 25, 1876.

A Rare Fracture of the Upper Extremity of the Tibia.—Mr. Duplay reports the following interesting case. A workman, aged 60, was injured by the sudden fall of a wall that was in process of demolition. On the next day the foot, leg, and lower third of the thigh were swollen, with considerable tension of the integuments, under which there was an enormous bloody infiltration. There was also effusion into the knee-joint. The leg was parallel to the plane of the bed and in a straight line with the thigh, but just beneath the patella there was a sudden depression, that looked as if it had been produced by a blow of a hatchet. The leg could be moved freely in both lateral directions, but without crepitus, and it could be elevated so as to form an angle with the thigh, but the depression still remained. Crepitus could only be obtained in front of the head of the fibula, where there was a small fragment of bone completely detached. The femur, patella, fibula, and articular ligaments were not injured. Extension failed to reduce the deformity, but a partial flexion brought the shaft of the tibia into proper position with the broken fragment. The limb was maintained in this semi-flexed position by means of a cuneiform pad and a few turns of bandage, but on the next day the dorsum of the foot was found to be cold and discolored, and the leg as far up as the knee covered with bullæ containing sero-sanguinolent fluid, and the dressings had to be removed. There was no pulsation in the posterior tibial artery. The leg was then put on a double inclined plane, and subsequently simply laid on its outer side on the bed; but nevertheless gangrene set in; and the patient died of pneumonia complicated by cerebral troubles on the thirteenth day after the accident.

The autopsy revealed old meningitis of the convexity, and extensive pneumonia. The leg was the seat of a vast gangrenous phlegmon, and the fractured ends of the bone were bathed in a bloody and purulent effusion, which extended into the knee-joint. The popliteal and anterior tibial veins were ruptured, and the popliteal artery compressed by the broken fragments of bone, and its lumen further obstructed by a fibrinous clot. The head of the tibia above the tubercle was broken into four fragments—a middle, an internal, and two external; the middle, which was also the largest fragment, comprising the insertions of the crucial ligaments. Several of the lines of fracture extended into the knee-joint. The femur, patella, and fibula were not injured.

This is certainly a rare variety of fracture, and surgical literature contains but few examples of analogous injuries. It was not produced by direct injury, for the integuments were not broken, and the patella, its ligaments and the condyles of the femur, were not injured, but probably by a sudden and forcible extension, so to speak by an effort at *anterior flexion*, in the course of which the large median fragment, containing the insertions of the crucial ligaments, was torn from the shaft of the tibia. The displacement backwards of the upper fragments was probably due to the weight of a stone falling on them at the moment of the injury.

In the treatment of similar injuries a position of semiflexion which will replace the tibia in the axis of the superior fragment will best fulfil the indications. It must be remembered, however, that all fractures of the upper extremity of the tibia unite but slowly and with difficulty, which is more marked the nearer the fracture approaches the joint, probably because the solution of continuity affects a spongy and very vascular tissue, and the effusion of blood between the fractured ends is always considerable.—*Le Progrès Médicale*, April 29th.

University of Michigan.—To the medical colleges of New York who have consented to receive the tickets of the University of Michigan, that of the University of the City of New York is to be added.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, June 24, 1876.

THE ENGLISH DEBATE UPON THE PATHOLOGY OF SYPHILIS.

V.

Having presented in brief the essential points of the opening paper of the debate upon the Pathology of Syphilis, at the Pathological Society of London, as well as those of the remarks of the various speakers, it now only remains for us to consider the speech of the president of the society and the summing up of the orator, Mr. Jonathan Hutchinson. The remarks of the president, Mr. George Pollock, contained no noteworthy point, being rather a series of interrogatories addressed to the next speaker, rather than a presentation of facts. It is evident that, like that of many of the participants in the discussion, the gentleman's knowledge upon the subject is of a general and practical character, and that he has not paid especial attention to its study. He attributes very little importance to the division of the disease into stages, and is not certain as to the precise period at which its contagion ceases, though he thinks that hereditary transmission is possible in the tertiary stage. He alluded to the fact that surgical lesions of continuity often remained ununited owing to a tertiary syphilitic condition. He did not agree with Sir James Paget as to the sequelæ of fevers, and thinks that those of typhoid are of pyæmic nature and often symmetrical. After congratulating the society upon Mr. Hutchinson's paper and the debate, he called upon that gentleman for his reply. The latter reviewed the various leading points brought out in his opening, and pronounced himself in the most emphatic manner as a believer in the cryptogamic nature of syphilis. Seeing that previously he had not clearly formulated this view, the suddenness of the avowal is somewhat startling. It must be conceded that his course was either wise or lucky, for had this aspect of the question been developed as a feature of the opening, we are not certain where the debate, which was very long indeed, would have ended. Though his opinion is strongly expressed, it is evident that his ideas are by no means mature or clear. His view, that the existence of a syphilitic yeast or *contagium vivum*, as causing syphilis, offers the best and most rational explanation of the phenomena of the disease, is obviously open to the most serious criticism, and shows that he is almost exclusively wedded to the humoral doctrines of pathology, as applied to syphilis. He still thinks that the analogy between the course of syphilis and the exanthemata is well taken, not having been shaken by the remarks of some speakers, which, he says, dealt with opinions rather than facts. He reiterates the statement that, as a rule, syphilis, when uninfluenced by treatment, is tolerably orderly in its course, while that of the exanthems is far from being as regular as we are accustomed to think. We cannot here follow Mr. Hutchinson in his remarks as to the state of the blood as modified by the syphilitic germs, and shall only repeat more precisely the fact that he thinks that the principal processes take place in that fluid, and that the rôle played by the tissues in these diseases is only secondary. It is readily seen that this view opens the way to extended comment and analysis, such as indeed are precluded by the nature of this notice. It seems strange that, among so many eminent pathologists, the great import of Sir Wm. Jenner's suggestion, that syphilis is a *flesh and blood* disease, was not fully appreciated, and that the doctrines therein embodied did not seem to be familiar to them. It may here be suggested that if the doctrine of a ferment in syphilis is admitted, the analogy between it and the exanthemata must be, to a greater or less extent, conceded; but when it is urged that, perhaps, certain specific proliferative changes take place in the tissues themselves, and that from them, by the medium of the blood, the disease is perpetuated and communicated, the analogy, to say the least, is weakened, and a line of argument is established, which was, as we have shown, only hinted at by one or two speakers, and by Mr. Hutchinson rejected. Indeed we have reason for the suspicion that he did not appreciate the full significance of the train of facts embodied in Sir Wm. Jenner's suggestion. Thus it will be seen that, with this cardinal point unconsidered, nearly all the remarks were a practical concession of the analogy; hence that we are, at the end, exactly where we commenced. We very much regret this result, as the occasion was a rare one, and much could have been said as to the place of syphilis in nosology. It is true that some light has been thrown upon the nature of the sequelæ of certain blood diseases, but as to that of the tertiary lesions we have had little added, other than opinions; so that, in his reply, Mr. Hutchinson expresses his theory as to their simple nature, and as to their being tissue derivatives from pre-existing specific lesions, with more emphasis than he did in his introduc-

tory. In this connection we may say that we, for many reasons, wholly repudiate this hypothesis, for we look upon it as simply a theoretical expedient rendered necessary by the doctrine of ferments just considered. Passing now to practical questions, Mr. Hutchinson calls attention to the fact that contagion generally occurs within the first two years of the disease, and that various clinical facts go to show that the blood does not retain its infective properties but for a few years. He allows syphilitics to marry at the expiration of two years after the disappearance of the last syphilitic symptoms. Mr. Hutchinson makes clever use of the germ theory to explain late hereditary transmission of syphilis, by saying that, perhaps, the germs remain latent in the testes and ovaries for a longer period than in the blood. This shows the weakness of the humoral theory, as it is an unequivocal concession that the elements of the disease remain latent in the tissues themselves. It seems curious that an observer of his ability and a thinker of his powers should thus stultify himself to the import of facts which is clearly apparent, merely to preserve the symmetry of a theory. We shall not follow the argument of the orator as to the nature of infantile syphilis, as it is really a piece of special pleading in favor of his yeast theory, with an evident intent of throwing ridicule on the tissue theory, as expressed by Sir Wm. Jenner in the term "potentialities of development." It is very clear that Mr. Hutchinson is so far biased by his blood and yeast hypothesis that he cannot or will not admit any other view. The result is to very much impair the value of his summing up. Mr. Hutchinson's remarks upon the effect of a syphilitic fœtus upon the mother, are interesting, if not thoroughly orthodox in their teaching. He alluded to the fact, long ago spoken of by Colles, that women bearing syphilitic children were not by them infected, and stated that no exception had been brought forward. In explanation, he thinks that a modified form of syphilis is given to the woman, in which there is a protection to her from severe manifestations, and which is unattended with cutaneous lesions. He compares its nature to that of vaccination. It will be seen that this is a direct admission from him that the fœtus can infect (though in a qualified manner) the mother. But, further on, he declares himself a believer in the doctrine that syphilis may be derived from the father alone, while the mother escapes, and promises further information on this point. The rest of his reply was simply in answer to certain minor issues raised by the various speakers, and it contains nothing noteworthy or important. Those of our readers who have followed us in our brief presentation of this debate, will see that, while it has suggested many points, much has been left untouched, while some of the direct issues raised by the orator have been left in much the same state as before the debate. We have already exceeded our limits, and cannot now review critically the whole discussion, which was in many parts too long and wordy. We may, however, derive some benefit from its perusal, and we have the satisfaction of knowing that it can be rendered profitable to future debaters on this subject, in pointing out to them errors which they can avoid. In this connection we would remark that it can hardly be expected that a subject like syphilis, which, for its thorough discussion, requires special study and observation, can be very minutely handled by men who have only observed it in a general and practical way.

PATENT RIGHTS IN MEDICINE.

The allusion by the President of the American Medical Association to the subject of patent rights in medicine will doubtless tend to bring it before the profession for discussion. Although the principle upon which that provision of the Code is founded which makes it derogatory to the dignity of a medical man to hold a patent is an eminently proper one in spirit, it has long been felt that its strictly practical application has been more or less detrimental to the true interests of inventive genius. The mere fact that because the inventor of any particular apparatus is a medical man, he should receive no pecuniary benefit for his time, study, and labor, is certainly a very absurd method of proving the justice or utility of a law which makes such provisions. The primary object of all inventions directly or indirectly connected with the healing art is for the benefit of humanity, and so long as the object is attained the medical man should be remunerated by the consciousness of contributing his mite to the relief of suffering. He has no desire, neither has he the right, to withhold any of such benefits from his profession or his patients for mere pecuniary consideration; in other words, it is the duty as well as the privilege of every medical man to aid his professional brethren all he can, and not hamper them by any legal restrictions of royalty in the exercise of their functions. So far, the provisions of the Code should be considered absolute and beyond question.

The case is so different, however, with any invention which can also be used in other arts, that we see no reason why the medical man should be debarred from the exercise of the usual privileges of ordinary men. Because any given apparatus is used in medicine without restriction, there is no reason why, if it may be employed in the arts, the inventor should not receive all the pecuniary benefit which such a use might confer. Many inventions of this sort have been made by medical men for strictly medical purposes, and have afterwards been patented by outsiders for adaptation to other purposes. Certainly this is very unfair to the real inventor, and calls for some more reasonable interpretation of the spirit of the Code than at present appears to exist.

It is claimed by instrument-makers that no advantage is taken of inventors in their efforts to develop the

resources of our art, and that no more than the ordinary profit is made on new instruments or apparatus. This is as it should be, and so far as strictly medical or surgical appliances are concerned the inventor must be satisfied. When these instruments can be used or otherwise appropriated, and incomes can be derived from their sales, the inventor certainly has the right to protect his interests by a patent. Here, it strikes us, the line should be drawn, and the provisions of the Code should be so modified as to make it possible to distinguish between a strictly medical patent and the patenting of a medical invention to be employed for other than medical purposes.

THE NEW YORK ACADEMY OF MEDICINE.

WE call the attention of all interested in the prosperity of the New York Academy of Medicine to the remarks of Dr. Gouverneur M. Smith at a recent meeting of that body. This organization, with the commendable spirit of founding a home for the profession of New York, has secured to itself an elegant building, and has done everything which energy of purpose can effect and earnestness of good intention can direct to place it upon a substantial basis. So far its efforts have been attended with a flattering success, but the running expenses of the establishment, together with the present debt upon the building, are such as to call for pecuniary aid which shall lift it into a higher sphere of usefulness. When it is considered what a comparatively small sum is necessary to attain this laudable object, we are quite ready to believe that the appeal will not be made in vain. In no better way can the medical interests of this city be centralized, and its common professional good advanced.

Reviews and Notices of Books.

CLINICAL LECTURES ON DISEASES OF THE HEART AND AORTA. By GEORGE WILLIAM BALFOUR, M.D., St. And., F.R.C.P. Ed.; Physician to and Lecturer on Clinical Medicine in the Royal Infirmary, Edinburgh. Philadelphia: Lindsay & Blakiston, 1876.

THIS book contains the essence of Clinical Lectures delivered by Dr. Balfour, on cases of diseases of the heart and aorta that have fallen under his observation during the last eight years. In the seventeen lectures presented, 424 pages, the following subjects have been considered: The general diagnosis of cardiac diseases; incompetency of the aortic valves, with reference to the diagnostic significance of the murmurs, progress of the disease, prognosis and treatment; murmurs and other physical signs distinctive of mitral stenosis, curable and incurable; curable mitral regurgitation and its treatment; tricuspid regurgitation, curable and incurable; pulmonary murmurs and their signification; variation and vanishing of cardiac murmurs; intermittency and irregularity of the pulse, and palpitation; secondary results of cardiac disease; angina, and fatty heart; pericarditis, myocarditis, and hypertrophy, apart from valvular disease; remarks upon the action of digitalis, and the general therapeutics of cardiac disease; malposition of the aorta simulating aneurism; aneurism, and its treatment by iodide of potassium.

The general rules to be observed in making a diagnosis of cardiac disease are elaborately, and, for the most part, clearly stated under the head of peculiarities of the pulse, inspection, palpation, percussion, and auscultation. In this connection, the author states that "of all the signs of cardiac disease murmurs are those most usually confided in, yet they are really those of least value." This statement is based upon the fact, that endocardial are closely simulated by exocardial murmurs, and that real valvular murmurs may disappear either temporarily or permanently. To this the author admits of but a single exception, which has reference to the auricular-systolic, or the so-called pre-systolic mitral murmur. Every other murmur must be simply noted, and afterwards duly considered in connection with the probabilities, when the examiner makes up his estimate from evidence obtained by inspection, palpation and percussion. This is an important principle in physical diagnosis, and were it more generally recognized by the profession, it might be the means of lifting the great depression which has settled upon many patients who are supposed to be the subjects of grave cardiac disease. There is, however, a greater or less probability that any valvular murmur may be connected with actual cardiac disease, and this fact must always be borne in mind. For example, the author states that persistent accentuation of the pulmonary second sound, independent of pulmonary disease capable of producing congestion, is an invariable indication of cardiac valvular lesion.

With reference to the manner in which murmurs are produced, the author adopts the theory that they are due to the sonorous vibrations of fluid veins produced in the current of blood, but at the same time states that just how these sonorous veins are produced, and how they may be modified remains yet to be explained.

The author, while discussing the terms auricular-systolic and pre-systolic, as applied to the murmur indicative of mitral stenosis, refers to the writings of Drs. Leaming, Donaldson, and Flint, of this country, and combats the teaching of the first two gentlemen upon this point.

Dr. Balfour maintains that, although it may not be practically important whether the sound is produced when the auricle contracts or during the soundless portion of the systole of the ventricles, yet clearness and accuracy in teaching cannot be imparted without directing special attention to its rhythm. He believes that want of accuracy in this respect has led so experienced an observer "as Professor Flint to describe as pre-systolic, murmurs which must have been diastolic in rhythm." Dr. Balfour states unhesitatingly when a pre-systolic mitral murmur exists, contraction of the mitral orifice is invariably present, notwithstanding Prof. Flint has reported three cases in which there was present a pre-systolic murmur, and at death no lesion was found at the mitral opening, but lesions which gave rise to aortic insufficiency. The author claims that Prof. Flint has evidently erred in timing the rhythm of the murmurs in the cases he has reported; "for a murmur depending on aortic regurgitation is always diastolic, and therefore has a rhythm very different from a pre-systolic murmur. But even without timing these murmurs, they have each of them such a distinctly different character that no one perfectly acquainted with the pre-systolic murmur could ever mistake a diastolic aortic murmur for it." The latter portion of this statement is rather free-handed, and

we can scarcely understand how it is to be reconciled with the statement made by the author in another part of the volume, when he speaks of Prof. Flint as an observer "who has had much experience." In Chap. VI. the author refers to a curable mitral regurgitant murmur, associated with such diseases as typhus and enteric fevers, chorea, anæmia, chlorosis, etc. He also recognizes the existence of curable and incurable tricuspid regurgitant murmurs; and the most common cause, next to mitral stenosis, for these murmurs, is said to be bronchitis, acute and chronic.

While discussing angina pectoris, arsenic is recommended as the remedy most entitled to confidence as a prophylactic against cardiac neuralgia. To prevent irritation of the bowels, it should be combined with opium, or administered in smaller doses, as "it not infrequently happens that systems which are sensitive to the injurious action of drugs, are also sensitive to their curative action." For the relief of the attack, the author speaks with positiveness upon his estimate of the value of chloroform. It is maintained that there is no diseased condition of the heart which should deter the physician from the cautious use of this agent.

"The thing desired in angina pectoris," says the author, "is to free both cardiac muscle and cardiac plexus from the influence of the depressing agent, whatever it may be, which gives rise to the sub-paralysis on the one hand, and to the neuralgic pain on the other; and this can be done only by narcotizing the nervous centres, through which the reflex action takes place, and thus set the heart free." For this purpose chloroform is to be preferred above all agents, and is regarded as perfectly safe. He administers it from a smelling-bottle containing a piece of sponge.

Just how Mr. Balfour reconciles the following statement is somewhat mysterious even to Yankee ingenuity. He says: "Rheumatic pericarditis, worthy to be called so, is almost unknown to us;" and a little further on, "if we take cardiac pain, accompanied by slight, but still detectable effusion into the pericardium, or by friction about the base of the heart, accompanying acute rheumatism, as signs of rheumatic pericarditis, as they undoubtedly are, then I do not suppose that my percentage has been at all, if in any respect, less than that of my neighbor's."

The author believes that the nutrition of the cardiac muscle is increased by the action of digitalis, and that this is accomplished by increasing the force and duration of the heart's systole. He also claims that the iodide of potassium has the power to relieve the symptoms of aneurism in a most remarkable manner, independent of any other treatment whatever; but that its success, as a matter of course, will be materially promoted by adjuvant measures.

The author is perfectly certain that there is no remedial agent at the present time which can so surely give relief, so certainly prolong life in cases of aneurism, as the iodide of potassium. This work is illustrated, although the cuts are the least important feature. Taken as a whole, it is a book well worthy of being placed in the library of any physician.

LECTURES ON NURSING. By WILLIAM ROBERT SMITH, Resident Surgeon Royal Hants Co. Hospital. Phila. Lindsay & Blakiston. 1876. 12mo.

THIS little work comprises a course of lectures delivered to the Nursing Staff of the hospital, with which the author was connected. The subject is treated in a very comprehensive manner, for such as wish to become practically familiar with the duties pertaining either to medical or surgical nursing. For such it can be read with interest and studied with profit.

Correspondence.

MEDICAL CENTENNIAL AFFAIRS.

(*From our Special Correspondent.*)

RARE AND CURIOUS MEDICAL WORKS—MEDICAL BUREAU OF THE NAVY—PHOTOGRAPHS OF U. S. NAVAL HOSPITALS—MEDICAL ASSOCIATIONS AND SIGHT SEEING.

PHILADELPHIA, June 17, 1876.

I CALLED attention in my last letter to the various literary treasures of which the Model Army Hospital, in its exhibit at the Centennial Exposition, gives a merely introductory glimpse. Perhaps no more favorable opportunity will be offered than the present for a detailed reference to the curious and rare attractions which are here illustrated photographically. While thus alluding to the albums containing photographic representations of title or other pages from many valuable books in the National Medical Library, collected by the Surgeon-General and his assistants, we at the same time give an insight into the contents of the library itself, which has not yet been as fairly and fully appreciated by the masses of the profession as its great merits entitle it to. The expensive catalogues, as published, are of course only distributed to a few, while the profession at large seems scarcely to realize the extent of the resources that are placed within their reach. Lovers of rare and curious old books will be gratified at an inspection of the sample pages, even though they be but photographic fac-similes, detailed in the following list, all of which form a portion of the exhibit of the Army Medical Department. In addition to those given in my last letter, I may mention the following as being among the most venerable in this wonderful collection. "Aggregator de Medicinæ Simplicibus of Jacob Dondus Paduanus." (Folio, probably printed at Strasburg by J. Mentelia, about 1470. The editio princeps. Valescus de Taranta "De epidimia et peste." (Probably printed at Argentorati about 1470.) "Liber de complexionibus, proprietatibus, electionibus operationibus que laxativarum. Practica de Medicinis particularium ægritudinum," by John, son of Mesua. Venice. 1471. "Manual of the practice of medicine, by Arnold de Villa Nova." (According to Brunet, it is printed with type used at Mantua in 1473.) "Regiment der jungen Kinder." (Augsburg in 1473.) "Pandects of Matthew Silvaticus." (Folio, probably printed at Strasburg about 1475.) Edito princeps of the "Summa conversationis et curationis" of William de Salicet. 1476. "Tractatus de Regimine Sanitatis" of Benedictus de Nursia. Bononia. 1477. "First edition of Celsus." Florence. 1478. "Canon of Avicenna," folio. Patavia. 1479. "Artzneibuch" of Ortolff von Beyrlant. Augsburg. 1479. "First edition of the works of Petrus Argelata or de la Cerlata." Edited by M. Moretus. Venice. 1480. (The initial letters are illuminated.) Anatomy of Mundinus. (Without page or date.) Regimen Sanitatis of the School of Salernum. With the Commentary of Arnold de Villa Nova. 1480. First edition of the "Liber de Medicina" of Averroes. Venice. 1482. Rare edition of the works of Mesua. Venice. 1484. Treatise on poisons of Petrus de Abano. 1487. "Practica" of Valescus de Tarranta. Lyons. 1478. First edition of the "Liber Theicrise" of Avenzohar. Venice. 1490. "Ortus Sanitatis" of Meydenbach. Moguntia. 1491. (The figures are colored.) The collection of medical tracts known as "Articella." Venice. 1493. Treatise on medicine of Arnold de Villa Nova. Ve-

nice. 1494. "Lilium Medicinæ" of Bernard de Gordon. Venice. 1496. Tractate on Syphilis, by Grunpeck de Burckhausen. (Probably printed at Augsburg. 1497.) Treatise on syphilis of John Widman. 1497. Treatise of Gaspar Torrella on syphilis. Rome, about 1498. Treatise of Jerome of Brunswick on epidemics and the pest. 1500. (Contains some very curious and spirited woodcuts.) Fasciculus of John de Ketham. Venice. 1500. Commencement of an anonymous treatise on the pest. (Prior to 1500 A.D.) "Practica nova medicine" of John de Concoregia. Venice. 1501. Treatise on anatomy by Mundinus. 1507. "De Swangern frawen und hebammen Rosegarten," by Eucharius Roeslyn. Argentorati. 1513. (The original edition. In Latin it is the "De partu hominus" of Eucharius Rhodion, and is translated into English by Raynalde under the title of "The Woman's Book.") Collection of medical tracts. Venice. 1508. Works of Albucasis. Augustæ-Vindelicorum. 1519. Treatise of Ulrich de Hutten on guiac and syphilis. Bononia. 1521. Aldine edition of Galen. Venice. 1525. "Secreta Secretorum" of Aristotle. 1528. Aldine edition of the Greek text of Paulus Ægineta. 1528. A pamphlet of four leaves on the sweating sickness. Printed by Anthony Peypus, the younger. 1529. Treatise of Bertholomeus, "De proprietatibus rerum." London, Thomas Berthelet. 1535. Collection of pamphlets on syphilis. Basel. 1536. Vesalius' "De humani corporis fabrica, libri septem." Basileae. 1543. First edition. (Plates engraved under the direction of Titian.) Copy of an autograph poem by Philip Melancthon, "De considerationc humani corporis." Written on the fly-leaf of the copy of the first edition of Vesalius' "De humani corporis." Treatise on medicine by Gonetius Pereira. 1558. (A very rare book.) The first medical journal printed in German; being a translation of the "Journal des nouvelles découvertes" of Nicolas de Blegny. 1680. "Zodiacus medico-gallicus." A reprint in Latin of the first French medical journal—the "Journal des nouvelles découvertes," by de Blegny. 1685. A volume containing many water-color drawings of monsters, with MS. descriptions.

In addition to the works already enumerated there are photographs of about fifty other treatises on surgery and American medical history in the National Library, which, from their rarity, also deserve to be mentioned. I am disposed to devote considerable space to this portion of the exhibit of the Army Medical Hospital, for the very reason that your readers may never have so opportune a guide to the contents of the Library as that which I now offer them, and because in the modest little corner assigned to these albums, the latter may be very readily overlooked by the casual visitor. Here may be seen photographs of pages from "The noble experyence of the vertuous handywarke of surgeri," a translation of the "Hantwerck" of Jerome of Brunswick. London. 1525. "Practica in arte chirurgica" of John de Vigo. Lyons. 1521. "Hantwerck der Cirurgien," by Jerome of Brunswick. Utrecht. 1535. Alphonsus Ferrius, "De Sclopetorum sive archibusorum vulneribus." Rome. 1552. "Feldtbuch der Wundtartzney," by Hans von Gersdorff, called Schylhans. Franckfurt, A. M. 1551. First edition of the "Dix livres de la chirurgio" of Ambrose Paré. Paris. 1561. Commencement of the "Historiall Expostulation against the Beastlye abusers, bothe of Chyrurgerie and Physicke," by John Halle. Printed with his translation of the "Chirurgia parva Lanfranci, lanfranke of Mylayne, his briefe. London, 1565. First edition of the Treatise on the pest, small-pox and measles, by Ambrose Paré. Paris. 1568. First edition of the "Deux livres de chirurgie" of Ambrose Paré. Paris. 1573. Portrait of Ambrose Paré. From the folio edition of his works in French. Paris. 1575. (The first edition.) Manual of Surgery of Schylander. Antwerp. 1577. "Officinne et Jardin de Chirurgie Militaire" of Le Lievre. Paris, 1583. "Certain works of Chirurgie compiled by Thomas Gale." London. 1586. English translation of "Arceus." London. 1588. "Cirugia Universale of Gio. Andrea della Croce." Venice. 1605. "Treatise on Gunshot wounds" of Francis Plazzoni. Venice. 1618. First edition of the "Treatise on the Movements of the Heart and Circulation of the Blood," by William Harvey. Franckfurt. 1628. "Hoplocrisma spongus, or a sponge to wipe away the *weapon-salve*," by William Foster. London. 1631. "Viaticum" of John Woodall. London. 1639. "Institucion of Chyrurgerie," by Thomas Gaille. London. 1567. "La Grande Chyrurgie" of Guy de Chauliac. Bordeaux. 1672. "Severall Chirurgicall Treatises," by Richard Wiseman. London. 1676. "Treatise on Surgery" of Matthew Godfried Purmann. Franckfurt und Leipzig. 1692. Treatise of Purmann, containing fifty cases of gunshot wounds. Franckfurt und Leipzig. 1721. First edition of the Treatise of Park on Excisions of the Joints. London. 1783. "Reflexions sur les playes," by C. F. Faudacq. Namur. 1735. "Treatise on wounds" of J. D. Schlichting. Amsterdam. 1748. "Traité des plaies d'armes a feu," by M. Desport. Paris. 1749. "Collection of observations in the Military Hospitals," by Richard de Hautesierck. Paris. 1766. (One of the most valuable works in connection with the history of Military Surgery in France, and very rare.) "Joyfull newes Out of the New-found Worlde," being a translation of "Monardus," by John Frampton. London. 1596. Thatcher's "Brief rule to guide the Common-People of New-England how to order themselves and theirs in the Small-pocks or Measles." Boston. 1677. (From an autotype reproduction of the original broadside sheet in the Library of the Massachusetts Historical Society.) "Principia Medicinæ" of Ossorio. Mexico. 1685. Inaugural Thesis of William Bull, of South Carolina, "De Colica Pictonum," Leyden. 1734. (Bull was the first American graduate of Medicine.) Treatise of William Douglass on "The Practical History of a New Epidemical Eruptive Miliary Fever with an Angina Ulcusculosa Which Prevailed in Boston, New England, in the years 1735 and 1736." Boston. 1736. Inaugural Dissertation of John Moultrie, of South Carolina, on the "Yellow Fever." Edinburgh. 1749. (Dr. Moultrie was the first American graduate at Edinburgh.) Essay on Inoculation, by Laughlin Maclean. Philadelphia. 1756. Inaugural Dissertations of John Morgan. "De puris confectione," Edinburgh. 1763. "On Medical Schools in America," by John Morgan. Philadelphia. 1765. Of Benjamin Rush, "De coctione ciborum in ventriculo." Edinburgh. 1768. Of James Tilton, one of the first graduating class at the Medical College of Philadelphia. Philadelphia. 1771. Of Jonathan Potts and of Jonathan Elmer of the same class. Inaugural Dissertation of Peter De Sales la Terriere, on "Puerperal Fever." Boston. 1789. (Being the first printed Medical Dissertation of the University of Cambridge.) First number of the Medical Transactions of the Massachusetts Medical Society. Boston. 1790. "Journal of the Practice of Medicine," etc., printed at New York about 1790 (?). Being a reprint of a portion of the "Military Medical Journal" of De Horne. A Pamphlet of "Certificates of the efficacy of Dr. Perkins' patent metallic instruments." Newburyport. 1796. Treatise of James Tilton on Military Hospitals. Wil-

mington. 1813. First volume of the Ohio Medical Repository. Cincinnati. 1827. (A very rare medical journal.) "Journal de la Société Médicale de la Nouvelle, Orleans." New Orleans. 1839. (The first medical periodical published in the South; very rare.) Confederate States Medical and Surgical Journal. Richmond. 1864. (The only medical journal published in the South at this date.)

The Medical Bureau of the Navy makes a very modest display in the south-eastern portion of the U. S. Government building, but sufficient to exhibit its resources for usefulness in peace and war. Medical Director Joseph Wilson is in charge, with whom is associated Passed Assistant Surgeon F. V. Greene. Here may be found several handsome show-cases filled with medical stores and supplies, drugs, instruments, stationery, bottles, plasters, medicine cups, medicine chests, surgeons' note and report books, etc., etc. The object has been to exhibit the necessary outfit in all these items for a ship of five hundred men. Included in the medical stores for this number are 147 different articles. The general surgical armamentarium includes a variety of splints, sponges in profusion, numerous operating cases, with an additional "general operation case" of imposing proportions, "expeditionary cases," batteries, instruments for treatment of affections of the eye and ear, and of the genito-urinary organs, an autopsy case, dental instruments, microscopes, and the various modern guides to diagnosis, such as the laryngoscope, ophthalmoscope, etc. The older or retired surgeons of the present day have lived long enough to remember how scantily the navy of their younger days was supplied with all these mechanical aids and ready servants of the practitioner, which the department now liberally and judiciously places in their possession.

Around the walls are large framed photographs of the various U. S. Naval Hospitals at Mare Island, California; Chelsea, Mass.; Norfolk, Brooklyn, Washington, Annapolis, and Philadelphia. Unlike their brother officers in more conspicuous branches of the service, the surgeons, however deserving or however active they may be, but rarely come to the surface for public praise or notoriety, and we do not wonder therefore that the walls are barren, so far as their adornment with the features of naval medical celebrities is concerned.

Among the other articles in this exhibit may be mentioned a bedstead with a woven wire mattress, giving the advantage of good ventilation, cleanliness, and elasticity. There are also a fan of four revolving blades turned by the hand, for ventilating the lower parts of a ship in hot weather; and an acrater for distilled water. Next to these is a model, $\frac{1}{32}$ the natural size, of the U. S. S. *Idaho*, as used as a hospital ship at Yokahama, Japan, devised by Surgeon A. L. Gihon of the navy; the middle deck being arranged towards the stern of the vessel with separate rooms for officers, the greater portion amidships being a large open ward with about thirty beds, water-closets and attendants' rooms being placed well forward. There is also a model of a cot for transporting wounded men, planned by Surgeon A. C. Gorgas, U.S.N., and so surrounded by canvas, rope handles, etc., that it may be readily lifted or lowered without inconvenience to the patient. This at present rests temporarily on an amputating table, which, by the folding of a leaf, may be converted into a writing table; a necessary combination, we doubt not, for economical purposes on shipboard, but one which would offer no tempting inducements for investment to a purchaser on *terra firma*.

Having recently passed through a practical experience of the mutual influence of medical gatherings and centennial expositions, we are disposed to urge our professional brethren, when the next centennial comes around, as come it must if we only give it a little time and wait for it with sufficient patience, not to attempt the combination again. The State Medical Society of Pennsylvania met here on May 31st; the American Medical Association June 6th. Before they came there were fabulous estimates of the numerical strength of each. The State Society would certainly bring five hundred to the city,—if for no other purpose, to visit the Centennial; the National Association, judging from letters and other documentary evidence in anticipation, would overflow all smaller halls of more perfect acoustic qualities, and pack Horticultral Hall to its utmost. When the eventful day of meeting came, the number of delegates and permanent members on the register in both conventions was but fifty per cent. of all previous calculations. The American Medical scarcely exceeded the aggregate of the 1872 meeting in Philadelphia; and of those who came, not half of the delegates were ever present at any one time. The Centennial Exposition proved too powerful a magnet. A procession of Knights Templars on Broad street, on the second and last day of its session, disturbed the equanimity of the State Society so grievously that the latter lost two hours while the delegates were gazing at the novel spectacle. Quite a number of the doctors paraded in the ranks, and for the time being found no attraction in any of the points of order or discussions that occupied the time of the Society. Not more than 125 or 150 were present at any moment at the State Society meeting, and yet on the third day, devoted to an excursion to the sea-shore, as if to show that they had come to the city for enjoyment, 325 delegates, and ladies accompanying them, participated in it. You can readily appreciate the demoralizing effect upon the American Medical Association when about four hundred—generally not more than three hundred—delegates found themselves in a hall which the committee of arrangements had wisely, as they thought, secured in anticipation of an incursion of fifteen hundred,—a hall which Proctor and Tyndall, and many other shining lights of the rostrum and the concert stage, had previously filled, with scarcely a murmur. The greater portion of the hall being empty, the audience restless and inattentive because they could not hear all that was said and done, many of the delegates departing Centennial-ward whenever a fair excuse in the shape of a lengthy paper was offered them. These and other similar drawbacks to complete success prevented the meeting of 1876 from being the perfectly happy consummation devoutly wished for by all those who had been so long working together to make it ever after a grateful Centennial souvenir.

R. J. D.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from June 11th to June 17th, 1876.

Jaquett, G. P., Asst. Surgeon. Granted leave of absence for four months. S. O. 115, A. G. O. June 9, 1876.

Byrne, C. B., Asst. Surgeon, Assigned to temporary duty at these Headquarters. S. O. 104, Department of Texas, June 8, 1876.

Semig, B. G., Asst. Surgeon. Granted leave of absence for one month, on Surgeon's certificate of disability, with permission to leave limits of the Department, and apply for an extension of two months. S. O. 70, Department of Arizona, June 2, 1876.

Medical Items and News.

Registration of Foreign Diplomas in England.—It has been decided by the Medical Council of England that foreign medical degrees are not registrable.

A New Medical School in Glasgow, Scotland.—A new medical school has been founded in Glasgow, Scotland, under the auspices of the Glasgow Royal Infirmary. Its first session will commence in November.

The English Vivisection Bill.—The restrictions provided in the bill are unanimously condemned by the Medical Council, but they, feeling that some legislation is called for, have determined to recommend the adoption of provisions which shall give free scope to the legitimate pursuit of biological study.

Midwives in Iceland.—A recent Danish law provides for the licensing and governmental support of midwives in Iceland. The salaries vary from fifteen to thirty dollars a year. These women must either have very little to do or else are very poorly paid.

A New Dental Hospital is about to be established in Dublin, after the plan of the London Dental Hospital.

The Illness of Dr. Gurdon Buck.—The many friends of this distinguished surgeon, who have been so anxious regarding his recovery from his severe illness, will be gratified to learn that his symptoms have taken a favorable turn, and that he is in a reasonably comfortable condition.

The National Educational Association will hold its sixteenth annual meeting in Baltimore, Md., on the 10th, 11th, and 12th days of July.

British Medical Service.—It appears that Dr. Rolleston, during the discussion on the New Warrant, before the Medical Council, took occasion to eulogize the medical service of the U. S. Army. In the course of his remarks he expressed the conviction that medical men were not "properly treated in any service except that of the United States, which had set an example in that respect to the whole civilized world." The London *Lancet*, in order to prove the contrary, quotes from our recent leading article on the comparison of the English with the American Service.

A New Appliance for Bloodless Operations.—Mr. H. L. Browne, surgeon to the West Bromwich Hospital, proposes in the *Lancet* for June 3d a very useful modification of Esmarch's bandage. A suitable rubber ring is rolled along the limb and over a plug placed on the main artery. This plug is provided with a groove upon its upper surface which receives the ring and keeps it from shifting. The rings are made of different sizes, as are also the plugs, although the latter are only used over the larger arteries. The apparatus may be used as an ordinary tourniquet, by stretching instead of rolling the ring over the limb and plug.

Dr. Joseph Carson has, on account of ill health, resigned his professorship of Materia Medica in the University of Pennsylvania. Dr. Horatio C. Wood will probably succeed him.

Rio Janeiro.—Yellow fever is epidemic at Rio Janeiro.

The Alcohol Question.—The municipal authorities of the large towns in Sweden, and first in Gottenberg, gave the whole liquor trade into the hands of certain societies composed only of the most respectable citizens. These societies buy wholesale the best—that is to say unadulterated—liquor, and are in every way responsible for its retail. No intoxicating liquors can be sold except by vendors whom they have chosen, and who follow regulations drawn up by the societies and pay the latter a certain sum annually for their privilege. The regulations require that no intoxicating liquors are to be sold any evening after ten o'clock, or between five o'clock Saturday evening and nine Sunday morning. Great care is also taken to have food and such unintoxicating beverages as coffee and tea placed before the customers wherever brandy is sold. All the profits accruing to the societies which have control of the liquor trade are devoted to public and charitable purposes and institutions.—*Philadelphia Medical Times.*

Georgia Medical Association.—The following officers were elected for the ensuing year: Dr. R. Battey, President; Drs. K. P. Moore and A. W. Calhoun, Vice-Presidents, and Dr. R. M. Smith, Censor.

New York Academy of Medicine.—At the final meeting for this season of the Academy, held at its building, 12 West Thirty-first street, Dr. Gouverneur M. Smith, when presenting a portrait of Dr. James Anderson, from Dr. James H. Anderson, in the course of his remarks spoke as follows in regard to the present condition of the Academy:

Mr. President: The duty has several times devolved upon me to read letters from donors to this Academy presenting portraits of its distinguished Fellows, and a similar pleasant duty is afforded me this evening. We have now owned and occupied this spacious and beautiful building a little more than a year. When the Committee of Ways and Means were busily engaged in raising funds for the purchase of a permanent home, the Committee felt assured that when the Academy possessed an appropriate edifice the medical profession of this city would be benefited thereby. Convenient rooms for the accumulation of portraits, of works of art, and of a library, and for meetings of this and of other associations, were thought to be essential in promoting medical science, medical unity, and the public welfare in this metropolis. This building has proved a pleasant nucleus for the profession. Hanging on our walls already are seven portraits of distinguished Fellows. The majority of these likenesses were painted expressly for presentation to this Society. To say nothing of the pecuniary value of these donations, what hallowed thoughts are awakened in our breasts on viewing the lineaments of our venerable and of our departed worthies.

Since our last meeting I have conferred with one of the most distinguished of our ex-presidents, and his portrait, it is hoped, will soon adorn our gallery. The family of one of our deceased members, a brilliant surgeon, will also furnish, it is hoped, an additional likeness. Your Committee will not relax its efforts until the portraits of all ex-presidents, and of other well-known and departed associates, are in the possession of the Society.

I am unauthorized to speak of the valuable contributions which have been made to our library, but at our meetings the accessions have been, from time to time, announced. Many of the volumes have been choice and rare. In this direction an accession of several thousands of dollars has been made to our property. Besides these portraits and volumes several select pieces of art have come into our possession since the occupancy of this building.

The Academy, however, is not as yet in a condition

to accomplish all its desires in the way of affording facilities to the profession, and as an individual member of the Committee of Ways and Means would venture to give a few thoughts relating to this matter. A debt of ten thousand dollars rests upon this building; our city taxes amount to over eight hundred dollars *per annum;* a volume of Transactions is being printed; a janitor has to be maintained; expenses for fuel and gas require a large outlay, and we need the services of an assistant librarian under a salary. Our dues are but ten dollars a year, and the desire is to decrease them as soon as possible. In a kindred society—the Bar Association—the dues, I am informed, are forty dollars annually. Now in order that the Academy can fully accomplish the liberal purposes for which it was designed, its members must make it an object of personal interest.

The Committee of Ways and Means have accomplished more already than the most sanguine predicted. Each Fellow, however, should regard himself *ex officio* a member of the Committee. Such of our number who have already subscribed to the building fund should endeavor to increase their subscriptions, and those who have as yet failed to do so, should without solicitation feel it a duty to contribute to the same object.

Our mortgage should be paid off at once, and steps be initiated to provide more liberally for the wants of the profession of the city than the Academy at present can afford.

The late Dr. John O. Stone, whose sudden death has just cast a gloom upon us, subscribed five hundred dollars towards the purchase of this building, and but a few days before his decease proposed to add another five hundred to his donation, provided a sum could be raised sufficient to liquidate our debt. Let us bear his dying thoughts in memory and derive counsel from them.

It is not speaking too enthusiastically to say that gifts of varied natures, amounting to thousands of dollars, will here find a place of deposit if the Academy places itself on a broader and firmer foundation. The Academy stands to-day in a better condition than it has ever before occupied, and, if true to its interests, its Fellows can now place it in the position which its founders, about thirty years ago, intended that it should occupy.

Death of Behier.—Another gap in the French Faculty of Medicine is occasioned by the death of Behier, who succumbed, after a long and painful illness, on the 8th instant, at the age of 63 years. To the very last, he was laboriously and incessantly engaged in professional pursuits. Among his published works are his *Traité de Pathologie Interne*, which, however, was never completed; and his *Leçons Cliniques*, in which are to be found special researches on erysipelas, stricture of the œsophagus, pneumonia, with special reference to its treatment by alcohol, maladies of puerperal women, etc. His name is also intimately associated with capillary thoracentesis, hypodermic injections, and transfusion of blood. He held the chair of Clinical Medicine at the Hôtel Dieu.

British Army Medical Service.—The new warrant for the Army Medical Service in Great Britain does not meet with much professional favor.

Office Hours.—The fashionable office hours in New York are between nine and twelve in the morning. This arrangement gives an opportunity for seeing urgent cases early in the day, as well as an early morning airing.

Swiss Universities.—In the three Swiss Universities of Zurich, Berne, and Basle, there were, during the Winter Semestre 1875—1876, according to the official registers, 831 students, who were divided as follows: Zurich, 330; Berne (including the veterinary school), 299; Basle, 202. Out of this number there were 175 foreigners, viz.: 54 Germans, 52 Russians, 24 Austrians, 15 Americans, 12 Greeks and Turks, 7 Englishmen, 4 Frenchmen, 2 Italians, 1 Belgian, 1 Spaniard, 1 Hollander, and 1 Asiatic. In Zurich and Berne there were 63 female students, only 2 of whom were Swiss. of the rest 39 were Russians, 8 Americans, 5 Austrians, 4 Germans, 3 Serbians, one was French, and one English. The educational staffs of the three Universities numbered 101 regular professors, 37 assistants, and 61 instructors (agrégés). There was consequently one teacher for every four students. According to the *Augsburg Gazette*, there is in the University of Berlin only one teacher for every ten students, in the University of Leipsic one for seventeen, and in that of Munich, one for eleven. The *Journal Officiel* from which these numbers are taken, does not give the proportions which exist between the teachers and the students in France. According to the *Progrès Médical*, this failure to give the figures for France, is evidence that they would be but little to the credit of the country.

The Murder of Dr. George Cook, of Brigham Hall Insane Asylum, N. Y.—Dr. George Cook, the Medical Superintendent of Brigham Hall, Canandaigua, was fatally stabbed in the neck by an insane patient on the morning of June 12th, dying the same evening. The patient was a farmer by the name of Benson, who had only been recently admitted, and was not considered dangerous. He seemed to have been impressed with the idea that people were trying to poison him, and that Dr. Cook was endeavoring to administer the poison. Yesterday morning the Doctor, in making his usual rounds among his patients, met Benson in his room or in one of the halls. Benson immediately struck the doctor in the face and neck with a knife. Help was soon at hand and physicians summoned, and strong hopes were entertained for a time that the wounds would not prove fatal. All that medical and surgical skill could devise was brought to bear in the case, but failed, and the Doctor died about five P.M. His age was about fifty years. Benson had evidently prepared the knife for the attack on the Doctor, as it was found to have been recently sharpened, and he had wound cloth or paper around the handle, so that he could retain a firm hold of the instrument of death.

Influence of Vaccination.—In the German army, vaccination and revaccination are obligatory. According to statistics collected by the German authorities, the German army, which numbered a million men during the war with France, lost only 286 men by variola, while the French army lost nearly 26,000 by that disease.

Duval (Vincent), laureate of the Institut in 1839, Director of the Orthopedic treatment in the civil hospitals of Paris, died at Neuilly on the 29th of April, 1876, at the age of 80 years. He founded the Orthopedic establishment of Chaillot, was the first in France to perform tenotomy of the tendo Achilles in the treatment of club-foot, and one of the first to practice subcutaneous tenotomy. He published several works on Orthopedics, on the use of the mineral waters of Plombières, etc., etc. Dr. Joulin described him as "*grand homme, grandes moustaches, et grand couleur.*" One of his sons is founder and director of the hydrotherapeutic establishment of the rue du Dome.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, July 1, 1876.

THE USE OF PROPRIETARY MEDICINES.

Considering the great opportunity afforded the late President of the American Medical Association for saying a good word for the profession, we are the more surprised at the manner in which he treated the subject of proprietary medicines in his recent address. No one doubts that physicians have long been prescribing patented medicinal preparations, but such a reprehensible practice cannot be viewed as an argument to prove that the part of the Code of Ethics which forbids it should be modified or abolished. The fault of wrong-doing rests not with the law which is intended to prevent it, but with the individual transgressing. As the case now stands, the profession has been humiliated before the world by the virtual admission that not infrequently it is compelled to call in the aid of quackery to cure disease. If this be a fact, how can we reconcile our pretentious advocacy of the claims of scientific medicine? The use of secret remedies is such a disgraceful reflection upon the resources of our art, that the best we can say for it is that the more the practice is hidden in the humiliation of our own incompetency the better for the profession at large. But what have we to say of the wide-spread publication of an opinion from a leader in the profession, and a president of the representative Medical Association of America, that quack remedies are so useful in the treatment of disease that we cannot do without them, and that in view of making principle consistent with practice, we should alter our Code?

We cannot believe that the profession will hold itself responsible for this error of judgment on the part of the President of the Association. In the name of that profession we cannot too strongly condemn the principle upon which the argument is founded, and cannot too radically express our mortification of the mistaken policy which gave it such untimely utterance.

As a question of principle we must take a firm stand against every innovation of quackery, notwithstanding it may be backed by the very priests at our altars. The provisions of the Code in regard to the use of patent nostrums are explicit enough to suit the good intentions of every practitioner, high or low; and as far as the principles are concerned are beyond criticism. If science cannot compete with quackery, humbug, and ignorant empiricism in finding remedies for disease, it is time that we enlarged our laboratories, improved our methods of analysis, and studied our materia medicas. What kind of a spectacle do we present to the world in regard to the use of proprietary medicines? We claim, as leaders in professional thought, to be masters of the science of medicine; as well qualified practitioners, to be capable of making every possible application of the resources of that science for the good of our patients; and yet we acknowledge that the veriest quack can blindly stumble upon a remedy which we are glad to use, although ignorant of its composition. We cannot believe that the profession is willing to stultify itself before the public by any such admission. In that view we wish to see the Code stand where it is. The principle upon which it is founded cannot be improved, and we should jealously guard against any infringement of its provisions, not only by the ordinary practitioner, but by the President of the Association himself.

It is our duty and privilege to use anything and everything in the shape of medication which may be of service to our patients. We should fulfil these conditions without recourse to proprietary medicines. Even granting that some quack may throw a valuable remedy in our way, we have the facilities for ascertaining its quality and composition; but failing to do so, we should not, as scientific men, use it at all; in other words, we have no right to prescribe any remedy the composition of which we are ignorant.

It is often said by physicians in regard to proprietary medicines: "I know that this compound is a good one, and I use it." This is well enough as far as it goes, but unless the prescriber takes pains to ascertain upon what the good effects of such a remedy depend, he ignores all the claims of scientific therapeutics and sinks into the hopeless imbecility of aimless empiricism. While we are willing to admit that this evil of striking at disease in the dark is secretly winked at by many physicians, it is nevertheless radically wrong, and should, far from being excused, be unqualifiedly condemned as a disgraceful method of dodging the sacred obligations which we owe to our patients, and of sacrificing the best interests of legitimate medicine.

As a rebuke to the sentiments of the President on this question, we notice a coincidence almost providential in its significance, in the rejection of one of the papers read before one of the sections of the Association because its author advocated the claims of a secret remedy. A similar action for a similar reason was taken upon a paper read before the State Medical Society at its recent meeting. This is as it should be,

and the unanimous vote of the members is a pretty clear indication of the drift of professional opinion. The proper interpretation of the latter will prove to the President of the Association that the profession would much rather raise the standard of professional morals to the high level of the requirements of the Code, than lower that level to suit the convenient requirements of those who are proper subjects for discipline.

THE MEDICAL COLLEGE CONVENTION.

The holding of a Convention of Medical Colleges proves the existence of a laudable intention on the part of practical educators of discussing some of the possibilities of reform in medical education. As will be seen from the account of the proceedings in another column, many important suggestions were made, and concerning many abuses of the college system a definite opinion was expressed. Notably in this connection, the short-term system, so ably advocated by Dr. Gaillard, received a well-deserved rebuke. From the tenor of resolutions presented by Prof. Curtis, it will be seen that we are not the only ones who believe that shortening the term of college study, even under the most favorable circumstances, is detrimental to the interests of the student, and should be openly criticised. The beneficiary system, which is carried to such perfection in the school of double diplomas, is also unqualifiedly condemned. The recommendation of a system of graded study is another of the indications that the Convention is keenly alive to the necessity of reforms so long urged by the profession.

THE ASSOCIATION OF AMERICAN SUPERINTENDENTS OF ASYLUMS FOR THE INSANE.

The meeting of the Association of American Superintendents of the Insane, recently held in Philadelphia, proved to be so interesting that we have given a full report of it.

The importance of a proper care and treatment of the insane need not be urged upon the general practitioner, neither is it necessary to state that the opinions of the members on these subjects are of the highest value. Each of the gentlemen composing this Association has charge of an asylum for lunatics, and is an alienist of high authority and extensive experience.

We are pleased to see that the Association was not backward in the expression of its opinion concerning the disgracefully crowded condition of the Philadelphia Almshouse for the Insane, and it is to be hoped that some good will come of it. It is unnecessary to allude in detail to the scientific work done by the Association, as the report will, we trust, be sufficient to vindicate our judgment as to its value.

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

The Medical Society of the State of New York discussed during its meeting many questions connected with scientific and legislative medicine. The addresses of the President were exceedingly interesting and appropriate, and well sustained his reputation for scholarly attainments. The papers were on the whole good, and claimed the attention of the members. The subject of permanent membership was very thoroughly ventilated, and the society finally adopted the report of the committee. The advisability of revising the pharmacopœia was well entertained, and the suggestion that the matter lie over for another year was well considered. The resolution advising the establishment of independent examining boards for the colleges of the State met with the respectful reception which the importance of the movement demanded, but for lack of the necessary time for its discussion action was deferred until next year.

The publication of the Transactions has proved to be, pecuniarily speaking, a rather unprofitable undertaking. The fact that nine hundred volumes, half the original edition, are left upon the Society unsold, proves either that there is no great demand for the volume, or that the Committee of Publication and publishers failed to avail themselves of the ordinary facilities for advertising. The election of Dr. Squibb, of Brooklyn, as President for the ensuing year was eminently satisfactory to all.

Reports of Societies.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

SEVENTIETH ANNUAL MEETING.

JUNE 20.—FIRST DAY.—MORNING SESSION.

The Society met, pursuant to statute, in the Assembly Chamber, Albany, at 11 o'clock A.M., June 20th, 1876. The President, DR. THOMAS F. ROCHESTER, of Buffalo, called the meeting to order, and prayer was offered by Rev. Dr. A. J. Upson, of Albany. The President then delivered his

INAUGURAL ADDRESS,

in which he first made reference to the general sanitary condition of the State, and noticed the close relations which had existed between fluctuations in the prevalence of diseases and the fluctuations in temperature and barometric pressure. To the end of bringing about a systematic study of such relation, Dr. Rochester encouraged the association of health boards with the weather bureau.

The Doctor then passed to the consideration of certain

THERAPEUTICAL MEASURES

resorted to in the antipyretic treatment of disease. He regarded it as a subject demanding the greatest consideration. The views which at present were largely adopted had been derived, for the most part, from Ziemssen's *Cyclopædia of Medicine*, published in so attractive a form by the widely-known medical book publishers, Wm. Wood & Co., of New York. The measures referred to were water, quinine, and arterial sedatives; and, said Dr. Rochester, "is it not well to be cau-

tious about embracing too fully this new theory?" He was inclined to think that perhaps the enthusiasm of the Germans had biassed their reason; that they might have possibly erred in a direction opposite to homœopathy, and had recommended the use of too large doses. There might be danger that the valuable remedy, quinine, would be brought into disrepute by an indiscriminate use. *Salicylic acid* was referred to, and the doctor had been led to regard its action in rheumatism as similar to that of propylamin. With regard to all remedial agents, Dr. Rochester believed that the needed lesson of the present day was *caution*; caution with respect not exactly to the quantity, but to the *bulk* administered. If the patient required medicine, the question should be, how little did he require, and not how much would he tolerate? Nothing special had occurred in surgery to chronicle.

PRELIMINARY EDUCATION OF MEDICAL STUDENTS.

The President recommended upon this question that the requirements of the State Society be enforced. The course of instruction instituted at Harvard College was sustained, as leaving no loop-hole between the schools and the student, and at the same time it did not do away with the advantage of having a private preceptor.

SCHOOL HYGIENE.

Dr. Rochester next turned his attention to the above subject, and remarked that education was not, in all instances, the unmistakable blessing which it seemed to be, for it became necessary to acquire it at too great risks. His conclusions upon this point were, that no child under ten should be sent to a public school, and that every school district should have a competent and well-paid medical director, who should devote himself thoroughly and conscientiously to the many hygienic duties of the position.

It would not involve an increased expense; on the contrary, it would be to the community a most economical procedure. The Society, as representing the profession of the State, should take some action which would inaugurate and perpetuate a reform in this respect.

Dr. Rochester then referred to the members and delegates who had died since the last annual meeting. They were:

Dr. Coventry, of Utica; Dr. McNutt, of Warrensburgh; Dr. J. H. Armsby, of Albany; Dr. Peter McNaughton, of Albany; Dr. J. R. Van Kleek, of New York; Dr. Edward Delafield, of New York; Dr. Foster Swift, of New York; Dr. Ernst Krackowizer, of New York; Dr. Hubbard, of Lansingburgh; Dr. Wilkie, of Auburn; Dr. F. W. Root, of Hamilton, N. Y.; Dr. J. V. P. Quackenbush, of Albany; Dr. George Cook, of Canandaigua.

The President recommended an additional number of Vice-Presidents. He also recommended that an alphabetical list of permanent members appear in the volume of Transactions. He further stated that the bill requiring bail for costs in suits for malpractice had been found, as he had been informed, to be impracticable.

INTERNATIONAL MEDICAL CONGRESS.

The President then designated the following gentlemen to represent the State Medical Society at the *International Medical Congress* to be held in Philadelphia, on Monday, September 4th: Drs. Frank H. Hamilton, Chairman; Alonzo Clark, B. Fordyce Barker, C. R. Agnew, Ellsworth Eliot, and Austin Flint, Jr., of New York City; J. C. Hutchinson, E. R. Squibb, and Alex. Hutchins, of Brooklyn; Wm. H. Bailey, E. R. Hun, and Chas. H. Porter, of Albany; James P. White, Julius F. Miner, of Buffalo; Henry W. Dean, E. M. Moore, of Rochester; L. L. Tefft, H. D. Didama, Syracuse; John P. Gray, Utica; Edward H. Parker, Poughkeepsie; George Burr, Binghamton; Frederick Hyde, Cortland; S. O. Vanderpoel, Quarantine; G. A. Dayton, Mexico; Wm. C. Wey, Elmira; B. F. Sherman, Ogdensburg; Geo. J. Fisher, Sing Sing; Harvey Jewett, Canandaigua; J. Foster Jenkins, Yonkers; A. M. Vedder, Schenectady; Wm. Vosburg, Lyons; John D. Button, Auburn; Thomas M. Flandreau, Rome.

In conclusion, Dr. Rochester recommended that the delegates suggest action for the purpose of establishing a uniform system of weights, measures, and symbols throughout the world.

At the close of the President's address a telegram was read from Dr. Ellsworth Eliot, Vice-President, announcing his necessary detention in New York, on account of the sickness of Commodore Vanderbilt, whom he was attending. For that reason he also tendered his resignation; but upon motion of Dr. White, of Buffalo, the resignation was laid upon the table.

Dr. White then moved that Drs. J. C. Hutchinson and E. R. Squibb, of Brooklyn, and Dr. Chase, of Westfield, be appointed Committee upon the President's address. Carried.

The President then announced the following committees:

On Business.—Drs. Wm. C. Wey, J. Foster Jenkins, and M. H. Burton.

On Credentials.—Drs. T. D. Strong, Thompson Burton, Alex. Hutchins.

On Reception and Arrangements.—Drs. W. H. Bailey, E. H. Parker, E. R. Hun.

On Ethics.—Drs. E. M. Moore, Alonzo Churchill, J. W. S. Gouley.

On Nominations.—1st District, Dr. Henry D. Noyes, New York; 2d, Dr. George J. Fisher, Chairman, Sing Sing; 3d, Dr. R. B. Bontecou, Troy; 4th, Dr. Francis Burdick, Johnstown; 5th, Dr. Judson B. Andrews, Utica; 6th, Dr. J. B. Orton, Binghamton; 7th, Dr. Chas. G. Pomeroy, Newark; 8th, Dr. J. F. Miner, Buffalo.

On motion, a recess was taken for ten minutes to perfect the order of business. On reconvening, Dr. Wm. H. Bailey introduced Dr. E. D. Silvers, from the New Jersey State Medical Society, and Dr. A. P. Grinnell, of the Vermont State Medical Society, and they were invited to participate in the deliberations of the Society.

Dr. Bailey reported the names of the following gentlemen as invited members: Drs. L. D. Buckley, S. B. Wood, W. G. Tucker, A. Vanderveer, G. H. Armsby, M. R. C. Peck, F. C. Curtis, H. S. Case, D. H. Cook, T. M. Trego, and E. Beach.

The first paper was read by Dr. George Bayles, of New York, and entitled

CLINICAL STUDY OF DIPHTHERIA IN 1875.

Dr. Bayles' observations had been made chiefly upon dispensary patients, and he had introduced a test to determine what the nature of the disease was before the membranous exudation appeared. The test consisted in abrading the mucous membrane with a knife, when, if the case was one of diphtheria, the abrasion was soon covered by a diphtheritic deposit. All his cases recovered, and in none did paralysis follow. The constitutional symptoms began to yield in every instance about the eighth day. The object of the doctor's paper was to prove a doctrine precisely the reverse of that advocated by Dr. Billington, of New York, in a paper read before the Academy of Medicine,

and published in a former number of THE MEDICAL RECORD. He regarded diphtheria as probably an autochthonous disease, and not only that, but homo-autocthonous. With regard to treatment, his first intention was to strike a vigorous blow with the view of aborting the disease, and the agent he employed for that purpose was calomel, in not less than ten nor more than thirty grains given in a single dose. He supplemented the calomel with quinine and Dover's powder, with the view of producing diaphoresis without producing exhaustion. With the view of neutralizing and eliminating the poison, he used the elixir iodo-bromo-chloride of calcium in drachm doses, and also used the same remedy in the form of spray or gargle, whether patches were present in the throat or not. Nothing more was employed in the way of local treatment. The temperature and ventilation of the room, and proper care of the patients, were not neglected, and more or less of stimulants were employed.

The paper being open for discussion, DR. E. R. SQUIBB, of Brooklyn, remarked that he raised an objection to the paper appearing in the Transactions of the Society, upon the ground that in it a secret remedy was recommended. The fact that a proprietary medicine was introduced was sufficient, in his judgment, to prevent the publication of the paper as receiving the endorsement of the Society. There was much in the paper doubtless that was beyond his criticism, and it was perfectly proper that it should be published in the journals. It was only with reference to the point alluded to that the adverse criticism was made.

DR. BACON, of Oswego, criticised the paper because the author recommended the administration of *ten* grains of calomel to a child five months old, and he also believed that three grains of Dover's powder, combined with one grain of quinine, as recommended for a child of the same age, was a pretty solid prescription.

Upon motion made by DR. SQUIBB, the Society declared that the paper by Dr. Bayles was not a proper one to appear in the volume of Transactions.

On motion of DR. WM. H. BAILEY, the Treasurer of the Society was made trustee of the Merrit H. Cash prize fund, *vice* Dr. J. H. Armsby, deceased.

The Society then adjourned to three o'clock.

FIRST DAY—AFTERNOON SESSION.

The Society was called to order at three P.M. by the President, and the first paper was read by DR. ROBERT NEWMAN, of New York,

UPON THE BEST ELEMENTS FOR A GALVANIC BATTERY.

The Doctor introduced to the Society a new element, consisting of zinc and gold upon lead. It was maintained that batteries containing elements made in that manner possessed twenty-five per cent. more force than either the Dawson, the Byrne, or the Bunsen battery. The doctor did not exhibit a battery, but presented four pairs of elements, simply for the purpose of showing the initial force of each. A battery constructed upon his plan would cost thirty-five dollars.

The second paper was read by DR. EUGENE BEACH, of Gloversville, and consisted in the history of a case of

RETENTION OF URINE, WITH HYPERTROPHY OF THE PROSTATE GLAND, TREATED BY ASPIRATION—THE AUTOPSY AND MICROSCOPICAL EXAMINATION OF THE KIDNEYS.

The man was aspirated twenty times in eight days. The prostate was enormously enlarged. Infarctions were found in the left kidney, and it was the opinion of Dr. Vandervecr, of Albany, who made the post-mortem, that the hemorrhage from the kidneys was sufficient to account for blood in the bladder found after death, and which obstructed the flow of urine when the catheter was introduced. Right kidney congested.

DR. BAILEY introduced Dr. Calvin C. Halsey, delegate from the Pennsylvania State Medical Society, who responded with appropriate remarks.

DR. WHITE, of Buffalo, presented the report of the Committee on Prize Essays.

Two essays had been presented for the Merrit H. Cash prize, but the prize had been awarded to the one bearing the following motto: "Physiology has become a science by well-conducted experiments that have illustrated facts. Can Therapeutics claim to be a Science, while so many of its votaries are content with assertions without experimental facts to support them?"

The report of the Committee was accepted by the Society, and the Chairman directed to open the sealed envelope upon which was written the same motto, when the name of DR. SAMUEL R. PERCY, of New York, was found.

DR. WHITE then proceeded to report his twelfth case of

INVERSION OF THE UTERUS SUCCESSFULLY TREATED BY MEANS OF THE "EGG-BEATER REPOSITOR."

Before giving the history of the case, Dr. White reiterated the doctrine he had so long held, and so often published upon the subject.

The Doctor also exhibited several cases of

FŒTATION BY INCLUSION

which had been passed from the urethra of an unmarried woman, and regarded them as probably the result of extra-uterine pregnancy. It might have been a case of fœtation by inclusion.

DR. GOULEY, of New York, asked Dr. White whether any cranial bones had been passed?

DR. WHITE replied that no cranial bones had been found, but that the pelvic bones, clavicle, thigh bones, lower maxillary, and several others had passed.

DR. GOULEY remarked that he had seen portions of the maxillary bones in a cyst of the testicle of a boy under five years of age, which was evidently a case of fœtation by inclusion. The passage of the cranial bones would settle the question whether it was a regularly formed fœtus or otherwise.

The next paper was read by DR. L. DUNCAN BULKLEY, of New York,

ON THE TREATMENT OF PURPURA.

The interest in Dr. Bulkley's paper centred upon the use of ergot hypodermically in the treatment of that affection. He preferred the fluid extract to ergotine. The injections were introduced by preference about the pectoral muscles or sides of the chest. Large doses were required, and ℥ x. or xv. or even xx. or xxx. might be repeated every hour and a half. The remedy might also be given by the mouth, and he related a case in which he used ʒ ij. of the fl. ext. within ten days, administered in half-drachm doses. Dr. Bulkley also made some remarks upon hemorrhagic small-pox, chiefly relating to the differential diagnosis between it and measles.

The President called DR. KENDALL, of Onondago Co., to the Chair.

The paper being open for discussion, DR. SQUIBB remarked that he wished to say a single word of caution with reference to the size of the dose of the fl. ext. of ergot. Dr. Bulkley had recommended that ounce doses

of the fl. ext. might be administered without harm, but that must be exceptional. He should be very sorry to have the paper go out from this society without some check as regards such a dose as that. He believed that ergot, like very many other drugs, was liable to tolerance, but to make the broad statement that in ordinary cases the fl. ext. could be administered in ounce doses had a large element of danger in it. Papers presented there were not like papers presented for publication in the Journals. They stood then upon the endorsement of the Society; and if they went out in the Transactions, they went out with its endorsement.

Dr. Castle, of New York, directed attention to the fact that the injection in Dr. Bulkley's cases had been made in the gluteal and posterior scapular regions; and he was of the opinion that a much more favorable locality was the anterior wall of the abdomen, on account of the less liability to wound important nerves and blood-vessels, and in case abscess should be formed, it would not give the patient so much inconvenience as if situated in either of the localities mentioned.

Dr. Bulkley remarked, with regard to the size of the dose referred to by Dr. Squibb, that he recommended from ℥ x. to xv of the fl. ext., and only exceptionally a half drachm. The statement with regard to half and whole ounce doses, was according to Dr. H. C. Wood, of Philadelphia; but Dr. Bulkley did not embody it in his paper, did not regard it as his own statement, and should be sorry to have it impair the value of the paper.

With regard to the criticism of Dr. Castle, Dr. Bulkley remarked, he recommended that the injection should be introduced somewhere about the soft parts of the pectoral muscles or sides of the body. It was in a case which Dr. Hanks had treated, and to which Dr. B. had referred, that the injections were made in the gluteal region. Cleanliness of the syringe, slowness of administration, and depth of insertion, were regarded as points of importance, if the best effects would be realized from the remedy, and abscesses avoided. Dr. B. regarded abscesses as of infrequent occurrence if the injections were properly given.

Dr. Cartwright, of Delaware Co., asked if ergot was so valuable in the treatment of various hemorrhages and spinal congestion, why it would not be serviceable in the treatment of congestion of the brain, especially in congestive apoplexy?

Dr. Squibb regarded Dr. Bulkley's experience with reference to abscesses following the use of ergot hypodermically as unusually favorable, and thought that there were gentlemen present who had had a very different experience. He did not believe that Dr. Bulkley meant to incorrectly represent the result of using the remedy in that manner when he spoke of the general harmlessness of the injections; but his experience, and he believed that of others, did not justify such conclusion.

Dr. Wey, of Elmira, remarked that formerly abscess almost invariably followed his use of ergot hypodermically; but latterly, since he had used Dr. Squibb's aqueous solution, and used it only of such strength that *one minim represented one grain*, no more, he had not seen a single abscess produced, and the effect was just as decided.

Dr. Squibb remarked that the aqueous extract was much less irritating than the ordinary fluid extract, and further remarked that with regard to effect produced, it was best to gradually increase the dose until uterine colic was produced, and then fall a little back of that point, when the drug could be continued.

Dr. Stoddard, of Rochester, remarked that he had seen one drachm of the fluid extract introduced into the cavity of the uterus by Dr. Dean, of that city, and the physiological action of the drug produced within half an hour in most cases, and the effect was no more severe than when ℥ xv. or xx. were used hypodermically.

He had not seen any ill effect follow the introduction of the drug into the substance of the uterus itself, and had seen employed for that purpose Squibb's solid extract in the strength of one grain to ten minims of water.

Dr. Wey remarked that the largest dose of ergot he had employed was that in which one drop represented four grains of the powdered ergot; and the barrel of an ordinary hypodermic syringe had been filled and thrown into the connective tissue day after day without unpleasant symptoms other than the formation of abscess.

Dr. Squier remarked, with reference to poisoning by ergot, that there was no evidence of the existence of such symptoms as were detailed in the older text-books. He had repeatedly known of drachm doses being administered three or four times a day without rendering patients uncomfortable in any such sense as being toxic.

The next paper was read by Dr. James Chapman, of Medina, and consisted of the report of two cases of

TUMOR OF THE BREAST OF AN UNCERTAIN CHARACTER.

(We regret to say no microscopical examination was reported.)

Dr. E. H. Parker, of Poughkeepsie, exhibited a substitute for the hypodermic syringe, which consisted of a needle attached to a piece of glass tubing or barrel in the ordinary manner, and a rubber bulb at the other end to be worked with the thumb and finger.

Drs. Sayre, Sherman, Jenkins, and Bulkley were hardly able to coincide with Dr. Parker concerning the utility of the instrument.

After some discussion with reference to the question of discussing papers immediately after they were read, the subject was laid upon the table, and the Society adjourned to meet at nine A.M., June 21st.

WEDNESDAY, JUNE 21—SECOND DAY.—MORNING SESSION.

The Society was called to order at nine A.M. by the President; and prayer was offered by Rev. Bishop Doane.

The President announced that Dr. Orton, from the Sixth, and Dr. Miner, from the Eighth District, upon the Committee on Nominations, were not present, and substituted the names of Dr. Wm. Fitch, of Dryden, to represent the Sixth, and Dr. L. B. Cotes, of Batavia, to represent the Eighth District.

The minutes of the previous day were read, after which Dr. Squibb brought up the matter of conferring the Merritt H. Cash prize, and showed that the requirements of the Society had not been complied with, hence the prize had been improperly awarded by the committee. The author had not written upon the subject designated.

The President regarded the correction as well made, but further consideration of the subject was postponed until the afternoon session.

Dr. Wm. H. Bailey, of the Committee on Invitation, presented the following names: Drs. Henry Nachtel, of Paris, France; A. L. Lowell, Geo. P. Salmon, Isaac D. Meacham, W. A. Talmadge, T. Ham-

mond, Lewis Balch, J. B. Boyd, Jr., Geo. T. Stevens, I. De Zouche, E. Van Slyke, J. B. Stonehouse, C. S. Merrill, G. S. Ullman, W. H. Murray, John Thompson, J. C. Hannan, W. Hailes, E. B. Tefft, H. J. Fellows, W. W. McGregor, O. D. Ball, Hammond, of Dutchess Co., A. F. Sheldon, and J. D. Buchner.

The Treasurer's report was read and accepted, and referred to a Committee consisting of Drs. N. C. Husted, T. Dimond, and J. L. Banks.

COMMITTEE ON PUBLICATION.

Dr. A. E. M. Purdy, of New York, read the report, which was accepted.

The chief items were as follows: The number of Transactions for 1876 shall be 1,500; the committee shall hold the copyright in the name of the Society, and shall invite proposals for the printing, awarding the work to the lowest bidder; the style shall be the same as 1875, and the expense shall be defrayed by contributions from the county societies, they to receive a number of copies proportionate to the amount contributed; copies shall be sent to delegates from other States present at this meeting, to each medical library, and to other public libraries known to have a medical department; papers not placed complete in the hands of the committee within thirty days after the close of the session shall be excluded from the volume; and it shall be supplied to members and county societies at a price fifteen per cent. greater than their cost; the publication price shall be thirty per cent. greater than cost.

The committee also made a financial statement, showing that there was due for deficiency $413.60.

Dr. Parker, of Poughkeepsie, moved the adoption of the report, and offered the following amendments:

First, That no portrait be hereafter introduced into the Transactions without the vote of the Society. Carried.

Second, That lists of members of the various county medical societies be introduced annually into the volume of the Transactions.

Dr. Parker urged the amendent for the reason that it would be a great convenience to have a volume containing such list, without being obliged to buy the *The New York Medical Register*. The amendment was adopted.

On motion of Dr. Squibb, the Treasurer was added to the Committee on Publication, and the report as a whole was then adopted.

In the midst of the discussion upon the report Dr. Hiram Corliss, of Greenwich, Washington County, the oldest member of the Society, entered the chamber, and was received with cheers, the members rising.

Dr. Hutchison, from the Committee on President's Address, submitted the following report: In regard to the suggestion that the number of Vice-Presidents be increased, the committee recommended that no change be made. The suggestion to arrange the list of permanent members in alphabetical order was adopted. The committee recommended, in regard to the Merrit H. Cash prize fund, that the Treasurer of the Society be directed to pay to the author of the last prize essay from the funds of the Society the sum of $50, so as to place this prize essay on an equality with those which have preceded it, and that hereafter the prize offered be $100, only to be offered as often as the accumulated interest amounts to such sum. The committee also recommended that the name of President Rochester be placed at the head of the delegation to attend the International Medical Congress, and that his appointment of delegates be confirmed

The President took the floor, and objected to the last clause of the report, but his objection proved unavailing, and the report of the committee was adopted by a unanimous vote.

Dr. J. P. White moved that in case of a vacancy occurring in the delegation, the President of the Society be authorized to fill it. Carried.

Dr. O. White, of New York, from the Committee on By-Laws, reported a resolution that the Secretary of the New York County Society, and other societies who have revised their by-laws, be requested to send copies thereof to the committee of the State Society. The report and resolution were adopted.

Dr. Wm. H. Bailey announced an invitation, extended by President Rochester to the members and delegates and invited guests, to attend a reception at the Delavan House in the evening immediately after the delivery of the anniversary address. The invitation was accepted.

The next business in order was the reading of a paper on

LITHOTOMY AND LITHOTRITY,

with an analysis of thirty-five cases, by Dr. J. W. Gouley, of New York. It will appear in our next issue.

The paper was discussed by Drs. Corliss, Hamilton, Hutchinson, Vanderveer, Squibb, and Sherman.

Dr. A. N. Bell, of Brooklyn, then read a report from the

COMMITTEE ON HYGIENE.

It embraced reports from Saugerties, Yonkers, Rochester, Elmira, Ogdensburgh, and other parts of the State, upon defective drainage, water supply, etc., as giving rise apparently to the prevalence of zymotic diseases.

Dr. E. R. Squibb made his report as delegate to the American Medical Association, in which was embraced a lengthy consideration of the question of revision of the U. S. Pharmacopœia. Upon motion, the report was received, and the Publication Committee instructed to incorporate it in the Transactions. The resolutions introduced by Dr. Squibb can be found on page 395 of The Record for June 17th, 1876.

Dr. Dimond, of Auburn, then read a paper upon

EXTENSIVE DISORGANIZATION OF THE BRAIN WITHOUT CORRESPONDING LOSS OF FUNCTION.

Almost the entire brain had become a purulent mass, and yet there was no apparent loss of function, except of sight, which it was thought was explained by the pressure made by pus found upon the optic commissure. The Society then adjourned to meet at three P.M.

SECOND DAY—AFTERNOON SESSION.

The following papers, by title, were referred to the Committee on Publication:

Biographical Sketch of Prof. J. H. Armsby, M.D., Albany, by Willis G. Tucker, of Albany; Biographical Sketch of the late George H. Hubbard, M.D., of Lansingburgh, by Henry B. Whiton, M.D., of Troy; History of the Livingston County Medical Society, by Walter E. Lauderdale, M.D., of Geneseo; A Case of Fungus Cerebri, by Nelson Fanning, M.D., of Catskill; An Address upon Malpractice, read at the annual meeting of the Washington County Medical Society, by A. W. Tupper, M.D., of Groversville, President; Early Medicine in New York Province, by R. M. Wyckoff, M.D., of Brooklyn; Biographical Memoir of John Ferguson, M.D., of Albany, by Wm. M. McGregor, M.D., of Albany; A Case of Vegetating

Epithelioma of the Cervix Uteri, with Subinvolution of the Uterus and Pelvic Cellulitis, with Remarks upon its Etiology and Symptomatology, by C. E. Fraser, M.D., of Rome, read before the Oneida County Medical Society, June 1st, 1875; Biographical Sketch of the late Drs. Coventry and Bissell, of Utica, by Daniel J. Thomas, M.D., of Utica.

Dr. George J. Fisher, of Sing Sing, read the following:—

REPORT OF COMMITTEE ON PERMANENT MEMBERSHIP.

I. No one shall be, or shall be declared to be, eligible for election as permanent member who shall not have attended three annual meetings of this Society as a delegate, which meetings shall not be restricted to any one term of service of the delegates.

II. A division, on the basis of the above conditions, of the existing list (*vide* Trans., 1875, p. 465) of those who have heretofore been declared to be "eligible for election as permanent members," shall be made. There shall be two parts, which shall contain the names of

(*a*) Those who have attended three annual meetings as delegate; and

(*b*) Those who have not attended three annual meetings as delegates.

In all future elections of permanent members the names of those in Part II. shall be first considered.

It is recommended, if it be competent to do so, that the eligibility of those in Part II. be suspended until they shall have attended a total of three annual meetings, as above required, upon doing which their names shall be put upon Part II. without further action by the Society.

III. Hereafter permanent members may be elected annually from each of the (8) eight Senatorial districts of 1836, in the proportion of one permanent member to every eight delegates from the County Societies to which the district may be entitled, and one for every additional fraction of one-half or more of this number. At the time of their election, permanent members shall be residents of the districts which are credited with them, and shall be in good standing as active members of their County Societies.

IV. Each permanent member shall pay to the Treasurer of this Society an annual assessment of two dollars.

V. Each permanent member, who shall have paid his annual dues, shall have a copy of the Transactions for the year for which he shall have paid, sent to him by the Committee of Publication.

VI. Any permanent member, who shall fail to pay to the Treasurer his annual dues for three successive years, shall forfeit his permanent membership, and his name shall be dropped from the rolls of this Society. In this case, the permanent membership can be restored by subsequent payment of all arrearages to date.

VII. Any permanent member who shall be reported by the Medical Society of his county as being no longer in good professional standing or in active fellowship therewith, shall lose his membership, and his name shall be dropped by the Society.

VIII. Any permanent member who may remove from this State, shall lose his connection with this Society.

IX. Permanent members shall not act as delegates from County Medical Societies.

George J. Fisher.
Wm. C. Wey.
J. S. Prout.

The report was accepted, but its adoption gave rise to discussion; when it was made the special order for the morning session, June 22.

ROTARY LATERAL CURVATURE OF THE SPINE.

Dr. L. A. Sayre, of New York, read a paper on the treatment of rotary lateral curvature of the spine by extension, suspension of the body, and retention by the plaster-of-Paris bandage. The doctor made a practical demonstration, fully illustrating his treatment. He was listened to attentively throughout. Dr. Sayre expressed himself as being under special obligations to Drs. Vanderveer and Balch for their assistance, and to Dr. Hun for the case.

A recess was then taken for the purpose of having the members of the Society photographed in a body.

The officers and members grouped themselves on the front steps of the Capitol, and were photographed by Churchill.

The society re-convened at 4:35.

On motion of Dr. Squibb, the action of the Society Tuesday, in reference to the prize essay, was re-considered, and the subject referred back to the committee, as it has been discovered that the conditions of the prize had not been complied with, with power to report at the next annual meeting.

Dr. Bailey presented the names of the following gentlemen, who were invited to take seats on the floor and participate in the discussion: S. Delamater, A. Ennis, Jas. P. Alexander, W. H. T. Reynold, A. P. Ten Eyck, Desault Guernsey, Smith Baker, A. S. Cummings, R. H. Starkweather, H. A. Crary, Wm. T. Baynes, R. H. Sabin, L. R. Boyce, W. A. Hall, J. L. Archaumbault, Z. Rousseau.

Dr. Kendall was called to the chair. A discussion then ensued upon Dr. Sayre's paper, in which Drs. Moore, of Rochester, and Hutchinson, of Brooklyn, participated.

Dr. Moore asked the following questions for the sake of information: At what age did Dr. Sayre propose to discontinue this treatment for lateral curvature? Would he adopt this plan of treatment at the age of 20 or 25 years? As a rule, lateral curvature commenced about the time of puberty, and at that time the ligaments were capable of being stretched, and the bones were not very firm, and he was of the opinion it was well established that after the age of seventeen it was extremely difficult to make any impression upon the spine; and whatever was done in way of correcting deformities, was best done before that period in life. Again, in looking at the specimen exhibited, as well as other specimens, Dr. Moore had found so much absorption of the bodies of the vertebræ had occurred that the condition came under the head of organic change affecting the hard parts, and the question arose whether it was possible by any plan of treatment to cause absorption of the opposite side of the bodies, and thereby rectify the condition permanently. Dr. Moore asked these questions, because, thus far, the plan of treatment struck him pleasantly, and it seemed to mark a new step in the treatment of this class of cases. Again, how much exercise could the patient take in the open air? Could it be increased, or not?

Dr. Sayre replied that at present it was impossible to answer Dr. Moore's questions with very great certainty, because the plan of treatment had not been in use a sufficient length of time to furnish positive conclusions. As far as he had employed it, great satisfaction had been experienced by the patients; and if compelled to wear a jacket in lifetime, they were better off, according to their own statements. As far as age was concerned, Dr. Sayre had resorted to it in a man aged forty, in which case he made section of

the latissimus dorsi muscle, in order that the deformity might be almost completely overcome, and the result had been eminently satisfactory, because the spine was made nearly straight. The angles of the ribs, however, in such cases, would probably always remain somewhat more prominent than normal. As far as exercise was concerned, the patients were able to exercise more freely than before the dressing was applied.

Dr. Moore remarked that the question still existed in his mind, and had not been entirely set at rest by Dr. Sayre's experience. He maintained that the bodies of the vertebræ were absorbed to a certain extent in the specimens exhibited, and that in the cases in which the deformity was most marked they might not have more than one-half their normal thickness upon one side. The question then arose, if measures were adopted to bring the spine straight, did absorption of the bodies of the vertebræ upon opposite side take place, or was there a deposit of new material to compensate for the original loss in thickness? Dr. Moore farther referred to the straightening of the spine by making section of muscles as practised by Guerin long ago, but the spine was left unduly flexible in consequence. The doctor doubted very much the propriety of instituting any plan of treatment with the view of rectifying the deformity after the patient had reached the age of twenty or twenty-five years.

Dr. Sayre thought it quite probable that the bones themselves could not be restored; but that by restoring the spine to its natural position as much as possible, the weight was brought to bear upon the side opposite to that on which the absorption of the bones had taken place. Then, if absorption had taken place, as the result of superincumbent weight in one instance, why might it not occur in the other? The short time during which the treatment had been used, did not permit any positive conclusions upon these and many other important questions. The subject was open for study.

Dr. Hutchinson, of Brooklyn, regarded it as settled that absorption of the sides of the bodies of the vertebræ took place to a greater or less extent; and in the specimens he had in his hand, it was thought to have taken place to the extent of one-third the normal thickness, and yet it had not been a bad case of lateral curvature. He farther remarked that he should expect a good deal from the plan of treatment proposed by Dr. Sayre, and that if any change at all was produced in the bony structure it would be in the way of absorption rather than filling of the interspace between the bodies of the vertebræ with new material.

Immediately following the discussion, Dr. Henry D. Noyes, of New York, presented two papers, viz.: Cure of Blepharoplasty by a Special Method; Treatment of Diseases of the Lachrymal Duct, with some New Suggestions.

Dr. Wey, from the Business Committee, announced the reception of a communication from Dr. E. Seguin, of New York, which was read by the Secretary, and, upon motion of Dr. Squibb, referred to the delegation to the International Medical Congress.

Dr. Wey also announced the reception of a communication from the Boston Society of Civil Engineers, which took a similar reference. Both communications referred to the adoption of a uniform system of weights, measures, and thermometric scales.

Dr. Castle suggested that if the Society endorsed the adoption of the metric system of weights and measures, it should make it practical by incorporating it in the Transactions. Unless practical use was made of it, it would remain a theory forever.

Dr. Wey announced the reception of a communication from the State Dental Society; which, upon motion by Dr. Graves, of Steuben, was referred to the Committee on Ethics.

Dr. Husted made a report from the Auditing Committee upon the Treasurer's account, which was accepted and adopted.

Dr. Graves, of Corning, read a paper upon the

NATURE, ORIGIN, AND PROGRESS OF DISEASE IN THE HUMAN BODY.

Dr. L. J. Ames, of Mount Morris, was called to the Chair, and

Dr. Kendall proceeded to read the history of a case of

TETANUS FOLLOWING MISCARRIAGE.

Hydrate of chloral was regarded as the remedy which had most effect in producing a cure in Dr. Kendall's case, although morphine, whiskey, counter-irritation to the spine, and chloroform were all employed.

The Society then took a recess until 8 P.M., to listen to the President's address on the subject: "Medical Men and Medical Matters of 1776."

EVENING SESSION.

At eight o'clock the Society reassembled to listen to the address of the President, Dr. Rochester. The attendance was very large, the chamber being filled by the members of the Society and citizens. The address was a refined, interesting, and comprehensive *résumé* of the national medical history of the revolutionary period, and was listened to with marked attention throughout.

At the conclusion of the address, the Society proceeded to the Delavan House, and indulged in a banquet given by Dr. Rochester. It was a happy affair, and highly flavored with a sparkling social element.

THURSDAY, JUNE 22.—THIRD DAY.

The Society was called to order by the President, and prayer was offered by Rev. Dr. Reese.

In absence of the Committee on Credentials, Dr. Burr, of Binghamton, was designated to act in that capacity.

Dr. Bailey presented the following names for membership by invitation: Drs. F. A. Munson and Keegan, of Albany, and C. A. Bucklin, of Lansingburgh.

Dr. Robert Newman, of New York, presented his report as delegate to the New Jersey State Medical Society, which was accepted and adopted.

The following telegram was received by the President:

PUT-IN BAY, O., June 21.

TO THE N. Y. STATE MED. SOCIETY:

The Ohio State Medical Society sends greeting to your Society in endeavoring to promote progress in medicine.

President Rochester responded.

The President announced the following

COMMITTEE ON HYGIENE:

Drs. A. N. Bell, S. O. Vanderpoel, H. D. Didama, E. V. Stoddard, C. R. Agnew, W. C. Wey, and J. Foster Jenkins.

Dr. Judson B. Andrews, from the Committee on

OFFICERS ELECT.

Nominations, made the following report:

President—Dr. E. R. Squibb, of Brooklyn.

Vice-President—Dr. J. V. Kendall, of Baldwinsville.

Secretary—Dr. Edward R. Hun, of Albany.

Treasurer—Dr. Charles H. Porter, of Albany.

Censors—Southern District, E.R. Peaslee, New York; E. H. Parker, Poughkeepsie; Ellsworth Eliot, New York. Eastern District, Henry B. Whiton, Troy; Jas. L. Babcock, Albany; John P. Sharer, Little Falls. Middle District, M. M. Bagg, Utica; Geo. W. Cooke, Otego; C. G. Bacon, Fulton. Western District, C. C. Wyckoff, Buffalo; Harvey Jewett, Canandaigua; Caleb Green, Homer.

Committee on Correspondence—First District, Thos. Addis Emmet, New York; 2d, Wm. P. Townsend, Goshen; 3d, W. P. Seymour, Troy; 4th, Taber B. Reynolds, Saratoga; 5th, Samuel G. Wolcott, Utica; 6th, John G. Orton, Binghamton; 7th, Harvey B. Wilbur, Syracuse; 8th, Charles E. Rider, Rochester.

Permanent Members—First District, J. H. Hobart Burge, Kings; Wm. M. Blakeman, New York; 2d, Solomon Van Etten, Orange, Desault Guernsey, Dutchess; 3d, Daniel D. Bucklin, Rensselaer; Albert Vanderveer, Albany; 4th, Eugene Beach, Fulton, E. D. Ferguson, Essex; 5th, Frank D. Beebe, Madison, Joseph E. West, Oneida; 6th, George Douglass, Chenango, A. H. Crittenden, Steuben; 7th, A. H. Cumnings, Cayuga, Wm. Oliver, Yates; 8th, Wm. B. Ely, Monroe, George Abbott, Erie.

Eligible for Permanent Members—L. DeForest Woodruff, New York; J. F. Chapman, Westchester; B. A. Mynderse, Schenectady; C. G. Bacon, Saratoga; A. H. Crosby, Lewis; Loren J. Ames, Livingston; A. F. Sheldon, Wayne; Wm. Vosburgh, Wayne; J. C. Green, Erie.

Eligible for Election to Honorary Membership—W. A. F. Browne, Dumfries, Scotland; S. Weir Mitchell, Philadelphia.

For Honorary Degree of Doctor of Medicine—Samuel M. Crawford and Henry C. Seeley, of Orange.

Delegates to American Medical Association—C. S. Wood, J. W. S. Gouley, J. F. Miner, G. M. Smith, G. S. Winston, T. A. Emmet, L. De F. Woodruff, New York; J. C. Hutchinson, E. R. Squibb, A. N. Bell, Kings; G. J. Fisher, J. F. Jenkins, Westchester; E. H. Parker, Dutchess; H. B. Whiton, M. H. Burton, W. P. Seymour, Rensselaer; E. R. Hun, Chas. H. Porter, Albany; J. P. Sharer, Herkimer; B. F. Sherman, St. Lawrence; E. Beach, F. Burdick, Fulton; J. P. Gray, T. M. Flandreau, Oneida; F. S. Low, Oswego; G. W. Cooke, Otsego; F. Hyde, Cortland; H. N. Eastman, Tioga; Geo. Burr, Broome; T. H. Squire, Chemung; C. G. Pomeroy, Wayne; H. C. Jewett, W. T. Swart, Ontario; L. B. Cotes, Genesee; C. C. Wyckoff, Wm. C. Phelps, Wm. Gould, Erie.

Delegates to the Pennsylvania State Society—Wm. C. Wey, Chemung; Solomon Van Etten, Orange.

Delegates to the Massachusetts State Society—J. F. Jenkins, Westchester; J. L. Banks, H. P. Farnham, New York; Walter B. Chase, Greene.

Delegates to the Connecticut State Society—Alex. Hutchins, Kings; G. W. Bradford, Cortland.

Delegates to the New Jersey State Society—John Ball, Kings; H. D. Noyes, New York; R. H. Ward, Rensselaer.

Delegates to the New Hampshire State Society—Wm. Govan, Rockland; L. D. Bulkley, New York.

Delegates to Vermont State Society—Thompson Burton, Montgomery.

Delegates to Rhode Island State Society—Chas. M. Allin, New York.

Delegates to Canadian Medical Society—B. F. Sherman, St. Lawrence; H. G. P. Spencer, Jefferson.

Committee on Prize Essay—Henry W. Dean, Wm. S. Ely, Monroe; Julius F. Miner, Erie.

Committee on Publication—E. R. Hun, Chas. H. Porter, Wm. H. Bailey, Albany.

Committee on By-Laws—Wm. C. Wey, Chemung; E. R. Hun, Wm. H. Bailey, Albany.

Censor of Syracuse University—B. F. Sherman, St. Lawrence.

On motion by Dr. Burr, the report was accepted, and the Secretary instructed to cast an affirmative vote for the four highest officers.

Dr. Burr then moved that the remaining names in nomination be declared elected. Carried.

Dr. E. M. Moore, chairman of the Committee on Ethics, made the following report:

In regard to a communication relative to the absorption of physicians resident in Rensselaer county by the County Society of Albany and their refusing allegiance to the Rensselaer Society, the committee report that they find no express legislation on the subject, but entertain the opinion that the Constitution of the State Society was organized so strictly upon that of the political plan of the State that the territorial lines must govern the membership.

In regard to a communication from three members of the Ulster Society, complaining of the action of the Society in reprimanding a member for refusing to consult with another in good standing, the committee report that they know of no power in the Medical Society to compel a physician to consult with another physician. Any one may choose his companion as well as his patients.

In regard to a communication from the State Dental Society, the committee urge all members of the State Medical Society to be governed in their recommendation of dentists to their patients by the endorsement of the Dental Society. The report was adopted.

INDEPENDENT EXAMINATIONS.

Dr. E. M. Moore presented the following resolution:

Resolved, That a committee be appointed at the request of such Medical Colleges as may prefer such request, to be present at the examination of their students, made to determine their qualifications to enter the profession; also, that the committee be six in number, and be appointed by the President of the Society.

Dr. Moore spoke at some length upon the resolution, and it was also discussed by Drs. Bell, Prout, and Squibb. The resolution was referred to a committee of three, to be appointed by the Chair, to be reported upon on the second day of the next annual meeting at 12 o'clock.

The President named the following gentlemen to serve upon such committee: Drs. E. M. Moore and H. W. Dean, of Rochester; and C. C. Wyckoff, of Buffalo.

The report of the Committee on permanent membership was then taken up, and after an almost interminable discussion was amended in certain particulars, and adopted.

Section One was adopted as reported.

Section Two was stricken out.

Section Three was adopted.

Section Four gave rise to considerable discussion, but was finally adopted.

Section Five was adopted.

Section Six again gave rise to discussion, and Dr. Bailey doubted its legality. It was finally adopted.

Section Seven was adopted.

Section Eight was amended so that those members removing from the State should be regarded as non-resident permanent members having all the rights and privileges of honorary members, and then adopted.

Dr. H. D. Noyes offered the following additional section, which was adopted.

Section Nine. In case permanent members have failed for three years to pay their assessments, they shall be specially notified by the Treasurer and Secretary of the existence and operation of these By-Laws.

The report as a whole was adopted, and the Secretary instructed to obtain such legislation as might be necessary to assist in carrying out its provisions.

Dr. Squibb offered the following resolution, which was adopted:

Resolved, That the Committee on Publication be authorized to send presentation copies of the Transactions to the medical journals, domestic and foreign, to such individuals as may be interested in the contents of the volume, as may in their judgment be for the interests of the Society.

Dr. Andrews, of Utica, offered a resolution tendering a vote of thanks to the President for the able and impartial manner in which he had directed the business affairs of the meeting, and also for the pleasant social entertainment extended to the members and delegates at the Delavan House on the evening of the second day.

The resolution was unanimously adopted, and Dr. Rochester responded with appropriate remarks. The minutes of the morning session were then read and approved, and the Society adjourned to meet in Albany at 11 A.M. on the third Tuesday in June, 1877.

ASSOCIATION OF THE REPRESENTATIVES OF AMERICAN MEDICAL COLLEGES.

Held at Philadelphia, June 2d and 3d, 1876.

A convention of representatives of numerous medical colleges of the United States was held in the hall of the Jefferson Medical College, of Philadelphia, June 2d and 3d, 1876, in pursuance of the following call:

Louisville, Ky., May 15, 1876.

Following a general correspondence with the various medical colleges of the United States, the undersigned issue this call for a convention, to be held in Philadelphia, on Friday, June 2, 1876, four days in advance of the meeting of the American Medical Association. The object of the convention is to consider all matters relating to reform in medical college work.

That decided results may be reached, the faculty of each college is requested to send one or more delegates, clothed with *plenary* powers to determine final action on every question.

Should any college find it impracticable to send a representative, it is hoped that it will set forth fully by letter to the convention the views it may hold touching the suppression of existing evils and methods of practical improvement.

Officers of the following colleges have informally signified their hearty approval of the movement:

Jefferson Medical College, College of Physicians and Surgeons, N. Y., Bellevue Hospital Medical College, Ohio Medical College, Miami Medical College, Rush Medical College, Detroit Medical College, Louisville Hospital Medical College, Medical Department of University of Louisville, St. Louis Medical College, Keokuk Medical College, Cleveland Medical College, Starling Medical College, Medical Department of Georgetown College, Medical Department of Columbian University, Long Island College Hospital, Medical Department of Syracuse University, Evansville Medical College, Indiana Medical College, Medical Department of University of Nashville, Atlanta Medical College, Mobile Medical College, Savannah Medical College, Augusta Medical College.

The convention will be called to order in the hall of the Jefferson Medical College at 11 o'clock A.M., on the day above named.

J. B. Biddle, M.D., Jefferson Medical College.
Wm. H. Mussey, M.D., Miami Medical College.
John T. Hodgen, M.D., St. Louis Medical College.
J. Adams Allen, M.D., Rush Medical College.
W. T. Briggs, M.D., Medical Department University of Nashville.
J. M. Bodine, M.D., Medical Department University of Louisville.

At the hour named the following representatives assembled:

Jefferson Medical College—Prof. J. B. Biddle and Prof. S. D. Gross.

Medical Department University of Pennsylvania—Prof. R. E. Rogers.

College Physicians and Surgeons of New York—Prof. Edward Curtis.

Medical Department University of Louisville—Prof. L. P. Yandell, Jr., and Prof. J. M. Bodine.

Hospital College of Medicine of Louisville—Prof. J. A. Larabee and Prof. T. C. Wilson.

Long Island Hospital Medical College—Prof. J. H. Raymond.

Medical Department University of Iowa—Prof. E. Clapp.

College of Physicians and Surgeons Syracuse University—Prof. H. B. Wilbur and Prof. Van Duyn.

Chicago Medical College—Prof. L. Curtis.

Medical Department University of Georgia—Prof. E. Geddings.

Indiana Medical College—Prof. T. B. Harvey and Prof. L. D. Waterman.

Medical Department University of Wooster—Prof. W. J. Scott.

Cleveland Medical College—Prof. J. H. Bennett and Prof. Heims.

Detroit Medical College—Prof. E. W. Jenks and Prof. L. Connor.

Starling Medical College—Prof. S. Loving.

Medical Department University of Vermont—Prof. H. D. Holton.

St. Louis Medical College—Prof. J. L. B. Alleyne.

Atlanta Medical College—Prof. W. F. Westmoreland.

Medical Department University of Nashville—Prof. W. T. Briggs.

Medical Department Vanderbilt University—Prof. T. A. Atchison.

Missouri Medical College—Prof. A. P. Lankford.

Keokuk College Physicians and Surgeons—Prof. J. J. M. Angier.

Columbus Medical College—Prof. J. F. Baldwin.

On motion of Prof. Yandell, Prof. J. B. Biddle was elected President of the convention, and on motion of Prof. Bennett, Prof. Leartus Connor was elected Secretary.

On motion of Prof. E. Curtis, it was

Resolved, That the action of the convention shall not be considered binding upon the colleges represented unless endorsed by their respective faculties.

On motion of Prof. Gross, it was

Resolved, That a committee be appointed to submit business for the consideration of the convention, to report at the afternoon session.

The chair appointed as this committee, Profs. Bodine, Gross, Geddings, Holton and Scott.

The convention adjourned until 4 P.M.

Pursuant to adjournment, the convention reassembled at 4 P.M., the President in the chair.

The minutes of the last meeting were read and approved.

PROF. BODINE, from the committee to prepare business for the convention, reported the following questions for its consideration:

THE BENEFICIARY SYSTEM.

1. Shall the beneficiary system, with its present abuses, be condemned or endorsed?

After discussion, on motion of PROF. E. CURTIS, the following preamble and resolutions were adopted with reference to question first:

Whereas, The practice of reducing or remitting in individual cases the established fees of a college has the objectionable feature of discriminating between students who may be equally deserving, and opening the door to possible gross abuses; therefore,

Resolved, first, That this convention regards the above privilege as one to be deprecated in general, and, if put into practice at all, to be exercised both rarely and reluctantly, and only in unusual circumstances, and after unsolicited application by proven deserving candidates.

Resolved, second, That anything like a wholesale system of such reduction or remission of established fees, or any open solicitation of recipients of such favors, be regarded as in the highest degree improper, and that any college indulging in such practices deserves to forfeit its place on the *ad eundem* list of medical colleges.

THE SHORT-TERM SYSTEM.

Question 2. Shall two consecutive courses of lectures in one year entitle students to become candidates for graduation?

On motion of PROF. E. CURTIS, it was

Resolved, That it is the opinion of this convention that no two consecutive sets of lecture tickets shall be regarded as fulfilling the usual pre-requisites of instruction for graduation, where the time between the beginning of the first course and the end of the second is less than fifteen months.

BLANK DIPLOMAS.

Question 3. Shall any faculty, under any circumstances, issue a diploma not bearing the graduate's name?

On motion of PROF. WATERMAN, it was

Resolved, That no medical faculty should issue a diploma not bearing the graduate's name.

It was ordered that the meetings of the convention shall be at 10 A.M. and 4 P.M.

On motion, the convention adjourned.

The convention reassembled on Saturday, June 3d, at 10 A.M., the President in the chair.

The minutes of the previous meeting were read and approved.

On motion of PROF. L. P. YANDELL, Jr., the regular order of business was suspended, and communications were read from the faculties of the following medical colleges: Louisville Medical College, Kentucky School of Medicine, Evansville Medical College, Rush Medical College, Medical Department University Louisiana, Medical School of Harvard University, Savannah Medical College, Cincinnati College of Medicine and Surgery, Medical College of State of South Carolina.

On motion of PROF. ATCHISON, these communications were placed on file.

Question 4. Shall this convention resolve itself into a permanent organization?

On motion of PROF. ATCHISON, it was

Resolved, That the question be referred to a committee of five, to report at the afternoon session.

The chair appointed as this committee Profs. Atchison, L. Curtis, E. Curtis, Yandell and Scott.

On motion of PROF. ROGERS, the President and Secretary of the Convention and Prof. Atchison were appointed a committee on publication.

Question 5. Is there any reason why the customary diploma fee shall be abolished?

DIPLOMA FEE.

On motion of PROF. ROGERS, it was

Resolved, That it is the sense of the convention that the diploma fee should not be abolished.

GRADED COURSES.

Question 6. Is it advisable to adopt a graded course of study?

On motion of PROF. BODINE, the following preamble and resolution were adopted in reference to this question:

Whereas, A knowledge of the elementary branches of medicine should precede a study of the practical branches.

Resolved, That, in the hope of inducing students to prolong and systematize their studies, this convention recommends to all medical colleges to offer to students the option of three courses of lectures, after a plan similar to the following: Students who have attended two full courses of lectures on anatomy, chemistry, materia medica and physiology, may be examined upon any of these subjects at the end of their second course. During their third course such students may devote themselves to the lectures upon the theory and practice of medicine, surgery, obstetrics, and diseases of women and children, upon which subjects only they shall be examined at the final examination for the degree of M.D.—their standing, however, to be determined by the results of both examinations.

On motion, adjourned till 4 P.M.

The convention reassembled at four P.M., the President in the chair. The minutes of the last meeting were read and approved.

PROF. ATCHISON, from the committee to whom the subject of permanent organization was referred, reported the following resolutions:

Resolved, 1. That this *convention* now proceed to form a Provisional Association of American Medical Colleges, under its present officers.

Resolved, 2. That when the Association adjourns, it shall adjourn to meet at the call of its President.

Resolved, 3. That the various medical colleges be invited to take into consideration the project of forming, at the next meeting of this Provisional Association, a permanent Association of American Medical Colleges.

Resolved, 4. That for the furtherance of this object, a committee of three be appointed at this meeting to confer by letter with the various colleges, and invite their views on the proper object and plan of such proposed organization; and upon the receipt of the same, to draft a constitution and by-laws for a permanent Association, to be submitted at the next meeting of this Association.

Resolved, 5. That the advisory resolutions upon matters of college policy passed by this convention be printed and forwarded to all regular medical colleges in the United States for their consideration.

The Chair appointed as committee to carry out the foregoing resolutions Prof. T. A. Atchison, Prof. Edward Curtis, and Prof. L. P. Yandell, Jr.

These resolutions were adopted, and the convention resolved itself into the Provisional Association of American Medical Colleges.

Question 7. Is it proper for a regular college to have any kind of alliance with homœopathy?

IRREGULAR MEDICINE.

On motion of PROF. ATCHISON, it was unanimously

Resolved, That, in the opinion of this Association, medical colleges ought not to recognize or hold fellowship with any school or its alumni in which irregular medicine is taught as a part of the curriculum.

Question 8. Can college fees be made uniform?

On motion of PROF. GEDDINGS, this question was referred to a committee of five, to report at the meeting of the Association to be held in 1877.

The Chair appointed Profs. Geddings, Gross, Angier, E. Curtis, and L. Curtis, this committee.

MEDICAL EXAMINATIONS.

On motion of PROF. BIDDLE, the following resolution was unanimously adopted:

No degree in medicine should be conferred, under any circumstances, except after an examination in person of the candidate upon all the branches of medicine.

On motion of PROF. ATCHISON, the thanks of the Association were tendered to the President for the able and impartial manner in which he had discharged the duties of the chair.

On motion of PROF. YANDELL, the thanks of the Association were tendered to the Secretary for his efficient services.

On motion of PROF. LARRABEE, the thanks of the Association were tendered to Jefferson Medical College for the use of the hall and other courtesies.

On motion, the Association adjourned to meet at the call of the President.

J. B. BIDDLE, M.D., *President.*
LEARTUS CONNOR, M.D., *Secretary.*

ASSOCIATION OF SUPERINTENDENTS OF AMERICAN ASYLUMS FOR THE INSANE.

Thirteenth Annual Meeting, held at Philadelphia, June 12, 13, 14, 15, 16, 1876.

THE thirteenth meeting of this Association was held at Continental Hotel, Philadelphia, commencing June 12th. Dr. Clement A. Walker, of Boston, Vice-President, occupied the chair, until the arrival of Dr. C. H. Nichols, of Washington, on the second day. The first session was occupied in the hearing of reports from the different asylums throughout the country.

PRESIDENT'S ADDRESS.

DR. C. H. NICHOLS, Superintendent of the Government Hospital for the Insane, at Washington, arrived on the second day, and entered upon his duties as chairman. In regard to the investigation of the affairs of his institution by the Congressional Committee, he said that the sensational press had kept the public pretty well informed on all the unfavorable testimony. He had kept the members of the Association informed of the favorable testimony by papers he had sent them, and he did not think it important for him to furnish the testimony to the public. He had been the disbursing agent of the institution since the first appropriation had been made, and had disbursed all the funds except for the purchase of land. He had called four well-known business men to examine into his accounts, but the committee had refused to hear their evidence, the chairman remarking that no serious charge had been made against his honesty as a financial agent of the Government. He did not consider mere financial honesty as the highest qualification for a Superintendent of a hospital for the insane; but judgment on that subject was yet to be passed by the committee.

DR. JAMES H. DENNY, of Boston, exhibited a set of anatomical preparations of sections of the brain, made by himself in Vienna, and he urged the importance of having in all institutions a full set of sections of the normal brain for making comparisons in cases of post-mortem examinations of deceased patients.

MENTAL AND PHYSICAL SYMPTOMS OF CEREBRAL DISEASES.

DR. JOHN P. GRAY, of the State Lunatic Asylum at Utica, New York, then read a paper on "Mental and Physical Symptoms in Cerebral Diseases, and their Relations to Insanity."

CRIMINAL INSANITY.

In the evening the Association met again at the Continental to hear a paper by DR. ISAAC RAY, of Providence, on "How far Insanity should be received as an Excuse for Crime." He commenced by alluding to the English decisions in the cases of insane criminals, which now stand as law, but which were founded on mistaken estimates of insanity, and were really of little value in the light of recent scientific researches.

The plea of insanity, he said, did not meet with much favor among jurists and lawyers, and still less when they were informed that insane persons generally know right from wrong, and are capable of hatred and malice, thus apparently furnishing all the elements of crime. The lawyers, in their imperfect knowledge of the subject of insanity, make two great mistakes, one of which is that an insane person may be excused for a criminal act prompted by a delusion only so far as the provocation he imagined would excuse him if his delusion were merely true. This he declared was directly contradicted by the experiences of science. There was nothing more probable than that the person who imagined that his neighbor had been telling bad stories about him should also imagine that he was justified in taking his neighbor's life.

The other mistake made by lawyers was to leave out of the account altogether the moral faculties of our nature—the sentiments, feelings, and emotions. Disease of the moral faculties, he said, often resembled moral depravity. The question should not be, "Did he know the difference between right and wrong?" "Did he evince forethought and intention in his preparation for the crime?" but "Could he see the moral complexion of his act in its true colors?" "Had he the power to pursue the right and resist the wrong?" The existence of insanity, even in the smallest degree, being shown, it should be for the other side to show that the insanity did *not* influence the person to the commission of crime. This was now the rule in civil cases, where, if the insanity be shown, it was for the party seeking to establish the legality of the will or contract to show that the maker had recovered.

There was a tendency now to the belief that the plea of insanity was becoming too common, and that the punishment of the insane may prevent offences. To those familiar with insanity the falsity of this was beyond question. It impaired the freedom of the will. It blunted the sense of right and wrong and diminished the power of self control, and in every instance of crime there was room for the belief that the act would

not have been committed but for the presence of the disease. Very few of the insane would believe that they were insane, and, therefore, would not be prompted to crime by the knowledge of the immunity of the insane, nor would they be restrained by the knowledge that the insane were punished, as they insisted on considering themselves entirely outside of that class. As we stand now, our Legislatures were powerless, and the rules laid down by our courts were irrelevant, impracticable, and inconsistent; and this would remain so until the question of insanity should be merely a question of fact, to be established. Our judges, he said, were bound to make themselves acquainted with the nature of insanity by every means in their power, and to charge their juries from the result of their knowledge rather than by servile repetition of what has weight only because it has been said before. The Doctor closed by speaking highly of the value of expert testimony in cases of insanity.

An invitation to the members to visit the Academy of Natural Science at their leisure was read and accepted.

MENTAL AND PHYSICAL SYMPTOMS OF INSANITY.

The morning session of the third day was occupied in a discussion of Dr. Gray's paper on "Mental and Physical Symptoms in Cerebral Diseases and their Relations to Insanity."

Dr. Mark Ranney, of the Hospital of the Insane, Mount Pleasant, Iowa, believed that softening of the brain was much less common than was popularly supposed.

Dr. Isaac Ray, of Philadelphia, said that the influence of Dr. Gray's paper would be valuable in directing attention to the study of a class of cases to which too little attention had been given, simply because the opportunity did not present itself so frequently in the asylums. The phrase "Softening of the brain" was one of the most abused terms in our nomenclature. Softening was one of the rarest forms of cerebral diseases. Any other lesion of the brain was more frequent. He approved generally of the therapeutics indicated by Dr. Gray, who disapproved of depletion even in those cases in which forty years ago bleeding would have been the first thing resorted to. In cases of threatened congestion he believed trouble could often be prevented by depletion, but the moment for its profitable use passed very soon.

Dr. Walter Kempster, of the North Wisconsin Hospital for the Insane, Oshkosh, Wis., remarked that in every case of softening in which he had made post-mortem examinations, he had found miliary aneurisms in the midst of the softened tissue, their usual size being about one forty-fifth of an inch in diameter.

Dr. Edwin A. Kilbourne, of the Hospital for the Insane, at Elgin, Ill., was of the opinion that embolic softening of the cerebral hemispheres might exist without impairing the mental activity.

Dr. A. E. MacDonald, of the City Asylum for the Insane, Ward's Island, N. Y., said that, on post-mortem examinations he had found a great diversity of pathological appearances in cases where death had resulted after the same class of symptoms.

Dr. R. F. Baldwin, of the Western Lunatic Asylum, at Staunton, Va., described a post mortem examination he had made in the case of a negro who received a blow on the head, which he (the Doctor) considered trifling. He was surprised to hear of the negro's death the morning after the blow, and on the post mortem examination he found the whole anterior cerebrum in a state of softening. A spicula of bone an inch and a half long protruded from the frontal bone directly into the brain substance. This was caused by the kick of a horse received a year before. He cited this to show how largely brain diseases may exist without affecting the faculties.

The Association then adjourned until the afternoon.

On reassembling in the afternoon the Committee on Time and Place of the Next Meeting reported in favor of St. Louis, Mo., the time to be the last Tuesday in May, 1877. The report was unanimously adopted.

DELEGATES TO INTERNATIONAL MEDICAL CONGRESS.

The following delegates to the International Medical Congress were next appointed:

Dr. T. S. Kirkbride, of Philadelphia; Dr. Isaac Ray, of Philadelphia; Dr. John Curwin, of Harrisburg; Dr. C. A. Walker, of Boston, Mass.; Dr. Pliny Earle, of Northampton, Mass.; Dr. John P. Gray, of Utica, N. Y.; Dr. D. Tilden Brown, of New York; Dr. H. A. Buttolph, of Morristown, N. J.; Dr. Orpheus Evarts, of Indianapolis, Ind.; Dr Charles H. Nichols, of Washington, D. C.; Dr. Walter Kempster, of Oshkosh, Wis.; Dr. C. N. Hughes, of St. Louis, Mo.; Dr. H. C. Carrell, of Jacksonville, Ill.; Dr. J. H. Callender, of Nashville, Tenn.; Dr. W. S. Chipley, of Cincinnati, Ohio; Dr. James Rodman, of Hopkinsville, Ky.; Dr. Eugene Grissom, of Raleigh, N. C.; Dr. C. K. Bartlett, of St. Peter, Minn.; Dr. A. M. Shew, of Middletown, Conn.; Dr. James R. DeWolf, of Halifax, N. S.

CRIMINAL INSANITY.

The discussion of Dr. Isaac Ray's paper on Criminal Insanity being the next in order of business,

Dr. John P. Gray, of the State Lunatic Asylum of Utica, N. Y., said that present experience showed that there was a far greater danger of the guilty escaping punishment by feigning insanity than of the insane being improperly punished.

The great desideratum, he said, was to get the expert witnesses nearer the Court. In New York, when the accused plead insanity as his entire excuse, the Court appointed a commission of experts to discover whether the accused was insane when he committed the crime, and in no instance yet had the judgment of such a commission been overruled by the Court. This, he considered, a far better plan than the examination of an expert witness before a jury. The commission he spoke of decided whether the accused was a fit person to be tried at all.

The judges were careful in the appointment of the commissioners, and they were required to submit a report, embodying not only their opinion, but all the testimony taken before them, so that the opinion may be examined by the Court in the light of the evidence. This plan, he said, did away with the disgrace to the profession, now so often seen, of the directly contradictory testimony of experts, caused by the same case being presented to two different expert witnesses in entirely different lights.

Dr. Richard Gundry, of the South East Hospital for the Insane, Athens, Ohio, said that offences were often committed by persons who were perfectly irresponsible at the time, although they had no disease of the brain. Suppose a man had the gout, and in a paroxysm of the disease he assaulted his attendant; that man was as free from responsibility as though he were the most confirmed lunatic alive.

Dr. W. S. Chipman, of the Cincinnati Sanitarium, said that from his observation one of the greatest evils connected with medical jurisprudence was that persons were often called as experts who were not experts. As for hypothetical cases, he had always refused to an-

swer in court any questions founded upon them, because what might be evidence of insanity in one person might not be in any degree so in another. He had always refused to answer questions that were not founded on actual facts, and he had always been sustained by the Court.

Dr. A. E. McDonald, of the City Asylum for the Insane, at Ward's Island, New York, thought the Association should put itself on record in opposition to bringing insane persons before juries at all, inasmuch as the New York plan of a commission of experts had proved itself to be so much superior.

Dr. R. L. Parsons, of the City Lunatic Asylum, at Blackwell's Island, New York, said that in the case of Scannell, in New York, the attorney for the defence made up a hypothetical case and presented it to the medical expert, who testified that it was undoubtedly a case of insanity. The District Attorney then presented a hypothetical case to another expert, who testified that the person described manifested no signs of insanity.

Dr. Ray thought that the practice in Maine was better than the New York plan, of a commission of experts before trial. In Maine, if the accused plead insanity as his only excuse, he was sent for a time to the insane hospital for purposes of observation.

Dr. Henry M. Harlan, of the Hospital for the Insane, Augusta, Maine, described the working of the law requiring accused persons in whose cases the plea of insanity has been offered, to be placed in the Asylum of Observation. He said the law worked very well, except when any of the persons sent in for observation were found not to be insane, in which case they proved to be very troublesome, and the mingling of these sane criminals with the insane patients was a great evil. He had urged the establishment of another institution where such persons could be sent for purposes of observation, and to which persons acquitted on the ground of insanity could be committed.

THE DEPLORABLY CROWDED CONDITION OF PHILADELPHIA ASYLUM FOR THE INSANE.

The morning of the fourth day was occupied for the most part with an expression of opinion regarding the deplorable condition of the insane at the Almshouse of Philadelphia.

Dr. Ray spoke of the outrageous condition of the insane at the Almshouse, and said he was too tender of the good reputation of the city to speak of the place as it deserved. The insane of the city of Philadelphia were not by any means cared for as well as those of other cities. The violent patients were crowded together, three or four each in small 10×12 rooms, and the entire concern was crowded to overflowing. This condition of things, he said, was the result of mere parsimony. It was simply because the city did not choose to furnish the proper accommodations for their unfortunate population. It was the most niggardly and contemptible parsimony, that while the city spent millions in parks and other places of amusement, the insane were kept in this miserable way, at an expense of about $1.80 a week. Under a storm of indignation raised by the newspapers a short time ago, Councils put up a set of shanties entirely unfitted for the purpose, having no strength, with wards that a child could kick the sides out of, instead of providing the proper increase in accommodations. There was no reason, he said, why the insane of the city of Philadelphia should not be cared for by the State as well as the insane of Pittsburgh or Reading, and until the matter was taken out of the hands of the City Councils, nothing would probably be done. A State institution seemed to be the only way out of the difficulty.

Dr. Kirkbride confirmed all that had been said by Dr. Ray, and said that for a quarter of a century he and many others had been urging an improvement in the accommodations for the insane at the Almshouse, but without effect, and they concluded that the only way to even obtain an improvement was to let things go on until they had become so shametully bad that the public would rise in horror at the spectacle, and he thought that condition of affairs had very nearly arrived.

Dr. John Curwen, of the Pennsylvania State Lunatic Hospital, at Harrisburg, Pa., declared that he had always been in favor of establishing a State Hospital in Philadelphia, and the principal reason why the project to establish one in Philadelphia had failed, was because certain parties in Philadelphia wanted to handle the money for the buildings, and the Legislature did not think them the proper ones.

The matter was then, on motion of Dr. Curwen, referred to the Committee on Resolutions.

The Chair announced Drs. Walter Kempster, Mark Ranney, and E. A. Kilbourne as a committee to prepare a memorial on the death of Dr. McDill.

EXPERT TESTIMONY.

Dr. Thomas F. Green, of the Lunatic Asylum, Milledgeville, Georgia, then made a few remarks on the value of expert testimony in cases where pleas of insanity are entered in court. He thought that all members of the medical and legal professions should take care to post themselves thoroughly on the subject of insanity.

USE OF CHLORAL.

The afternoon session being called to order, Dr. T. R. H. Smith, of Lunatic Asylum No. 1, Fulton, Mo., introduced the subject of the use of chloral, which he considered a highly important one. He thought much injury was done by the injudicious use of this drug, and regarded it as a remedy which ought to be used with the greatest care, and the results closely watched. He believed that frequently the results of the chloral were mistaken for the regular progress of the disease, and that sometimes it had caused death. In chronic doses of insanity he regarded chloral as a very unsafe remedy. Also in the cases of aged people.

Dr. George C. Catlett, of Lunatic Asylum No. 2., at St. Joseph, Missouri, said that he knew of three well-authenticated cases of death from the administration of ordinary doses of chloral as a sedative in cases of delirium from intemperance.

Dr. C. F. MacDonald, of the State Lunatic Asylum for Insane Criminals, at Auburn, N. Y., remarked that on an occasion an attendant gave a patient two drachms of chloral by mistake. The patient suffered from acute mania, and soon after taking the dose fell into a heavy sleep, and afterwards awoke calmer and quieter, and progressed to a complete recovery.

Dr. A. E. MacDonald, of the City Asylum for the Insane, at Ward's Island, New York, considered chloral a valuable remedy, and had used it a great deal in his practice. He had never heard of a death said to be from chloral, where the post-mortem examination did not reveal other causes for death.

Dr. Kirkbride said that his sad experience with chloral had been, that sometimes patients died unexpectedly to him, and he would not like his medical friends to administer it to him under any circumstances.

Dr. Wm. M. Compton, of the Lunatic Asylum, Jackson, Miss., said that there were several noisy patients in

his institution who had taken doses of from 20 to 30 grains of chloral every evening for years, merely to quiet them and produce sleep, and he had never seen any bad effects.

Dr. R. H. Smith moved the appointment of a committee to examine and report at the next meeting on the use of hydrate of chloral. Adopted.

The Chair appointed Drs. T. R. H. Smith, C. F. MacDonald, of Auburn, N. Y., and H. M. Harlow, of Augusta, Maine.

Dr. Orpheus Everts, of the Hospital for the Insane, Indianapolis, Ind., read a paper on "Incidents of Civilization as Predisposing and Exciting Causes of Mental Disorders."

Dr. A. E. MacDonald presented a series of resolutions condemning the crowded condition of the Philadelphia Almshouse, after which the Association adjourned.

The Association extended its sessions until the fifth day, when Mr. Francis Wells, of the State Board of Charities, in order to defend the State authorities against the charge of inadequate provision for the insane at the Almshouse, said that a large hospital capable of accommodating six or seven hundred had been provided for.

Dr. Kirkbride said that the State has made an appropriation of $25,000 to commence the work of providing for the insane in the Almshouse and in the seven adjoining counties. This was a perfect farce. The Pennsylvania State Medical Society, he said, had recommended a hospital for the surrounding counties, exclusive of Philadelphia—not because they did not want Philadelphia to have a hospital, but because it was folly to expect to provide for the insane of Philadelphia and seven adjoining counties in one hospital. Superintendents agreed that six hundred patients was the maximum number proper to be in a hospital, and there should at once be two hospitals built for Philadelphia for the accommodation of the twelve hundred unfortunates in the Almshouse.

After the transaction of some routine business the Association then adjourned *sine die*.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from June 18th to June 24th, 1876.

Head, J. F., Surgeon and Medical Director. Granted leave of absence for two months, and fifteen days, with permission to go beyond sea. S. O. 120, A. G. O. June 14, 1876.

McCormick, Chas., Surgeon. To proceed to New York city, and there await orders. S. O. 123, A. G. O., June 20, 1876.

Vollum, E. P., Surgeon. Assigned to duty at St. Louis Barracks, Mo. S. O. 121, A. G. O., June 16, 1876.

Clements, B. A., Surgeon. To report to the Commanding General Department of Dakota, for assignment to duty. S. O. 121, c. s., A. G. O.

Sternberg, Geo. M., Asst. Surgeon. Assigned temporarily to duty as Attending Surgeon at these Headquarters. S. O., 74, c. s., Department of the Columbia.

Horton, S. M., Asst. Surgeon. Granted leave of absence for four months. S. O., 123, c. s., A. G. O.

Woodhull, A. A., Asst. Surgeon. Leave of absence extended one month. S. O. 121, c. s., A. G. O.

Weisel, D., Assist. Surgeon. Assigned to duty at Fort Canby, W. T. S. O. 69, c. s., Department of the Columbia.

Bartholf, J. H., Asst. Surgeon. Granted leave of absence for two months to visit the Centennial Exhibition. S. O. 69, Department of the Columbia, June 3, 1876.

Cherbonnier, A. V., Medical Storekeeper. Granted leave of absence for one month. S. O. 123, c. s., A. G. O.

Medical Items and News.

Association of Superintendents of Institutions for Idiots.—A convention of the Superintendents of the Asylums for the Feeble-Minded of the United States, was held at the Pennsylvania Training School, June 6, 7, and 8, there being present Dr. H. B. Wilbur, of New York; Dr. G. A. Brown, of Barre, Mass.; Dr. Tuck, of Boston; Dr. Doren, of Columbus; C. T. Wilbur, of Illinois; Dr. Kerlin, of Media; Dr. Knight, of Connecticut, and Dr. E. Seguin, of this city. These gentlemen represented institutions containing 1,300 inmates, and their deliberations were such as looked to the extension of their good work in all of the States. The proportion of idiots and feeble-minded to population was the same as that of the insane; while extraordinary provision for the latter had been very properly made in nearly every State, but little had been done or thought of for the comfort and amelioration of weak-minded children and idiots, excepting as they were shut up with the insane, or sunk lower in our almshouses. The superintendents of this specialty have now organized themselves into an association, calling to their aid and counsel both men and women outside of their institutions, who have distinguished themselves by an interest in these afflicted persons, for whom a better era seems now to open. On Wednesday afternoon an interesting exhibition of the classes under training was given before the Convention and a Committee of the Board of Directors—Messrs. Ash, Martin, and Rogers. Addresses highly complimentary to teachers and children were made by Doctors Knight, Brown, and Parish, the two first named gentlemen asserting that our American institutions now surpass those of Europe in thoroughness of appointment and educational success. The officers chosen for the year are: President, Dr. E. Seguin, of New York; Vice-President, Dr. H. B. Wilbur, Syracuse, N. Y.; Secretary, Isaac N. Kerlin, Media, Pa.; and the next annual meeting will be held at the Asylum for the Feeble-Minded, Columbus, Ohio, June 5th, 1877.

Rhode Island State Medical Society.—The sixty-fifth annual meeting of the Rhode Island Medical Society was held in Franklin Lyceum Hall, Providence, June 14th, at ten o'clock; Dr. Geo. W. Jenckes, of Woonsocket, President, in the chair. The reports of the various standing committees were duly presented and adopted, after which delegates from other State medical organizations were received. The report of the Fiske prize fund showed a balance in the hands of the trustees of $1,242.64. The trustees made no award of premiums on the subjects offered for essay last year. For the best dissertations on the following subjects, or either of them, the trustees offered the premium of $200 for this year: *First*. What is the best means, civil, social, and medical, that can be used for the prevention of disease? *Second*. The causes and nature of cerebral disturbances, so frequently occurring, especially those following active mental exercise.

Dr. W. O. Brown stated that the State Board of

Pharmacy, which was chartered by the General Assembly, upon the petition of this Society, six years since, had become a very useful and successful institution, and should receive recognition and encouragement from the Society. The report of the Board of Pharmacy for 1876 showed there are eighty four registered pharmacists and thirty assistant pharmacists in the State, and expresses satisfaction with the successful and harmonious working of the law.

The Board of Censors nominated Drs. George L. Collins and James H. Eldridge for delegates to the International Medical Convention, to be held in Philadelphia, September 6th.

Dr. S. S. Keene was appointed Anniversary Chairman for next year.

The following officers were elected for the ensuing year:

President, Dr. Edwin M. Snow, Providence; *First Vice-President*, Dr. Charles H. Fisher, North Scituate; *Second Vice-President*, Dr. Edward T. Caswell, Providence; *Recording Secretary*, Dr. Walter E. Anthony, Providence; *Corresponding Secretary*, Dr. Edward M. Harris, Providence; *Treasurer*, Dr. Timothy Newell, Providence (Dr. F. H. Peckham, Jr., declining a re-election); *Board of Censors*, Drs. Ariel Ballou, James H. Eldridge, Geo. Baker, Otis Bullock, Sylvanus Clapp, Welcome O. Brown, David King, J. W. C. Ely; *Registration Committee*, Drs. E. M. Snow, E. T. Caswell, Jas. H. Eldridge; *Publication Committee*, Drs. C. O'Leary, W. O. Brown, H. G. Miller, C. T. Gardner; *Auditing Committee*, Drs. C. W. Parsons, C. W. Fabyan; *Dinner Committee*, Drs. T. Newell, A. E. Ham.

On motion, it was voted to hold the September quarterly meeting in Lyceum Hall.

The annual dinner took place at 2½ P.M., at the Horse Guards Armory, Dr. George L. Collins, of Providence, acting as toast-master. After a brief and happy address of welcome by Dr. Collins, the toasts were responded to in their regular order, the entertainment closing with a humorous poem by Dr. Virgil O. Hardon, of Providence.

Recent Changes in the Faculty of the Medical Department of the University of the City of New York.—Prof. Charles A. Budd has been made Emeritus Professor of Obstetrics, and will continue his clinics in Bellevue Hospital. Prof. Walter R. Gillette has resigned. Dr. Wright, former lecturer in the summer faculty, will deliver the course of lectures on obstetrics during the next winter session. Prof. Erskine Mason has resigned. Prof. Faneuil D. Weisse has been made Professor of Practical and Surgical Anatomy, and will have charge of the dissecting room. Prof. Witthaus has been made Adjunct to the Chair of Physiology and Physiological Chemistry. Dr. J. W. S. Gouley has been made Professor of Genito-Urinary Diseases.

Medical Society of the County of New York.—At a stated meeting of the New York County Medical Society, held June 26, 1876, Drs. Edward F. Walker, Mary Elizabeth Baldwin, and John A. Steiner, were elected members.

International Medical Congress at Philadelphia.—Delegates have been chosen as follows: By the Medical Society of London, England, William Adams (President), Drs. J. Langdon Dower and Richard Davy (Honorary Secretary). By the Medical Society of Copenhagen, Drs. Edmund Hansen (President), Carl Lange and S. Engelsted. By the Pathological Society of Dublin, Mr. Joliffe Tufnell and Prof. William Stokes. By the Waterloo County Medical Society of Canada, Drs. D. L. Walmsley, G. W. Bingham, T. W. Vardon, J. H. Webb, D. S. Bawlley, and J. P. Jackson. By the Medizinischer Verein, A. Greifswald, Prof. Hüter. By the Obstetrical Society of Edinburgh, Drs. Alexander R. Simpson (President) and Finlay. In all cases such delegates are chosen as express a desire or intention to be present. The following gentlemen, in addition to those previously mentioned, will also attend the Congress: Henry Power, of London, J. A. Estlander, of Helsingfors, Alfred Haviland, of London.

The Late Dr. John O. Stone.—At a stated meeting of the New York Academy of Medicine, held June 15th, 1876, a committee, consisting of Drs. A. C. Post, Oliver White, and G. M. Smith, presented the following preamble and resolutions, which were unanimously adopted:

Whereas, It has pleased Almighty God to call away from earth the soul of our late fellow, Dr. John O. Stone,

Resolved, That we have heard of the death of our late associate with sincere regret.

Resolved, That we cherish his memory as that of a learned and intelligent member of the medical profession, of an honest and upright man, and of a public-spirited citizen.

Resolved, That we sympathize with his family in the great bereavement which they have sustained.

Resolved, That a copy of these resolutions be sent to the family of the deceased, and to each of the medical journals of this city.

S. S. PURPLE, M.D., *President*.
W. T. White, M.D., *Secretary*.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending June 24, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
June 17.....	0	4	58	0	28	50	11
June 24.....	0	8	36	3	29	49	17

University of Pennsylvania.—Dr. H. C. Wood was, on the 20th inst., elected by the Trustees of the University of Pennsylvania, Professor of Materia Medica, etc., in place of Prof. Joseph Carson, resigned. For the first time in many years in that city the appointment was made without a contest.

Dr. Walter R. Gillette has been appointed an Attending Physician to the New York Lying-in Asylum.

Rabies from Bite of a Non-rabid Dog.—Mr. Holcombe, Veterinary Surgeon of Plainfield, reports a case of rabies in a heifer which was bitten by a dog. The heifer died; the dog is alive and well, with the exception of a gun-shot wound received while running about in the field.

Hydrophobia.—A very extensive or serious outbreak of rabies, epizootic in its nature, has recently occurred in Bavaria. It is stated that about fifty persons have been bitten in a short time by mad dogs.

University of Leipsic.—The united salaries of the professors of the University of Leipsic amount to 87,000 marks, or $21,850 in gold.

Original Communications.

TWO CASES OF SEVERE COMPOUND FRACTURE, WITH REMARKS.*

By FREDERICK D. LENTE, M.D.,
SARATOGA SPRINGS, N. Y.

CASE I.—*Crushing of the Elbow-Joint. Recovery, with a useful Joint.*—M. OB., a young and healthy man, a workman in the West Point Foundry, sustained the above injury, on the 20th March, 1875, in consequence of the fall of a mould, weighing four tons and a half, upon the part, which was caught between the box and a hard pavement. Of course, all the tissues directly involved in the injury were crushed to a jelly. But, fortunately, the edge of the iron box seemed to have passed mainly through the centre of the joint, and it was so sharp that it cut through the bones like a chisel. Restricting the hemorrhage by means of Esmarch's bandage, and assisted by Dr. Murdock, I enlarged the wound and removed the detached fragments, consisting mainly of about half the head of the ulna, longitudinally chipped off, and a piece of the internal condyle of considerable size. The ulnar nerve lay completely bare in the wound for at least three inches, and had a bruised appearance. The limb was placed in an angular gutter of tin, and a vessel arranged to supply a constant small stream of water to some lint laid over the wound. At the end of two weeks the arm was put up in a plaster splint, with *fenestra* for allowing the exit of pus. At the end of five weeks from this date, the immovable apparatus was removed, and *a guttered splint was applied to the inner* aspect of the arm, and another to the forearm; and these were connected by Stromeyer's screw, which permitted the very slightest and most perfectly graduated motion of extension or flexion to be communicated to the joint by the patient himself, by turning one thread of the screw at a time. Thus motion, so slight as not to interfere at all with the union and cicatrization of the soft parts, could be used, and yet sufficient to prevent any false anchylosis. He first made only one turn of the screw a day; and, as the healing progressed, two; then three, etc. And when he thus got the arm extended, he proceeded, in like manner, to flex it. This apparatus was employed for nearly three months.

After the removal of this apparatus, he was directed to carry light weights, and use the hand as freely as possible. The sensation in the little and ring fingers was but slight; but there was no neuralgia, which was feared from the condition of the ulnar nerve.

In a letter dated December 21st, written to me while in Florida, he says: "I am gaining slowly but steadily; can carry a pail of water and place it on a table, and saw wood. But the motion at the wrist, which originates at the elbow (he means supination and pronation), is lost as yet. It is getting very strong." Dr. Murdock writes that he has now free motion, through an arc of about 120°. Has good and steadily increasing power in the biceps; no rotation of forearm. Has recovered sensation in the little and ring fingers perfectly.

CASE II.—*Compound fracture of surgical Neck of Humerus. Rapid Recovery, with a useful joint. Use of Plaster Splint.* This case is not reported because it is an extraordinary one, either as regards rarity or result, but partly to call the attention to the peculiar fitness of the plaster bandage, not only for this injury but for various other accidents which frequently occur at the shoulder-joint and vicinity, and which are of a peculiarly troublesome nature, and, not seldom, rebellious to treatment.

W. H. M., a young married man, a machinist by occupation, fell from a fruit tree on the 10th Sept., 1875, a distance of about fifteen feet, striking apparently on his left shoulder and elbow. He got up and walked into the house, being only stunned for a few moments. I found him, soon after, sitting on a sofa, with very little pain, and no evidence of shock. On opening his shirt I saw, with much surprise, about an inch or so of the fractured end of the humerus protruding through the skin. From the manner in which the soft parts were forced upwards by the blunt end of the bone, which was broken directly across, the opening appeared to be an inch or so only below the clavicle; but, on reduction, was found to be at the inner border of the deltoid, some distance below the clavicle.

Having secured the assistance of Dr. B. J. D. Erwin, the surgeon of the Military Academy at West Point, and aided by Dr. Goldthwaite of the house-staff of Bellevue Hospital, I sawed off an inch or so of the projecting bone, to facilitate reduction, and also to prevent subsequent overriding of the fragments; reduction was thus easily effected. Having then removed some small fragments at considerable depth, by twisting them out with the forceps, the arm, forearm, and hand were placed in a tin gutter. The liability of the parts adjacent to the wound to become excoriated by the discharge lodging between them was foreseen and provided for, as far as possible, by directing constant watchfulness on the part of the attendants.

Sept. 12th.—Has had but little pain, and, with the aid of mild anodynes, has rested pretty well.

On the fourth day, 13th, there was much discoloration and tumefaction, extending, more or less distinctly, from the root of the neck, over the shoulder and scapula, and down the side to the lower border of the ribs, and the temperature was 104°. The discharge was of the ordinary purulo-sanguinolent character of this period of the injury, and already excoriating the integuments of the axilla. The tin splint proving uncomfortably heavy on the chest and abdomen, it was removed, and the forearm placed in a sling, with a few turns of bandage around the arm and body; his extreme care in changing his position obviating any danger of injurious motion at the seat of fracture. This was a great relief. Patent oakum was stuffed into the axilla to catch the discharge, and frequently changed. A thick cataplasm was applied over all the swollen parts, from the neck to the hip. Under it, the trouble rapidly subsided, and it was gradually reduced in size and thickness.

On the 4th October the patient had been progressing very favorably; appetite and spirits good, sleeping well without anodynes, but never able to assume the recumbent posture completely, on account of motion communicated to the fracture by the attempt. At this date applied the plaster bandage, using the rollers rubbed in dry plaster as usual. The whole arm and forearm, to the wrist, including the left shoulder, was secured solidly to the body. Extra layers were carried from the median line behind, over the shoulder, the outer aspect of arm, and ulnar border of fore-arm. During the setting process the end of the bone was kept pressed firmly against the head, to secure it in complete apposition. From the time the splint be-

* These cases were verbally reported at a meeting of the "Georgia Medical Society," at Savannah, in Dec., 1875.

came solid and hard, the patient experienced complete relief, and could lie down without difficulty, and required no further attendance. I did not see him again, having moved from Cold Spring in the meantime, until he met me by appointment, between six and seven weeks after, at Prof. Darby's clinic in the University of the City of New York, where I removed the apparatus, at his request, in the presence of the class. It was removed like a cuirass, in such a manner that it might easily have been reapplied, if necessary, by a few turns of roller to secure it. But it was unnecessary, as the union was found to be complete, and the patient already had tolerably free motion at joint. There was some stiffness at the elbow, for which passive motion was enjoined.

In February the patient came to Florida to put up some machinery, having recovered sufficient use of his arm to attend to business, and visited me at Palatka, where I had an opportunity to examine his arm again. The motion of the arm was restricted somewhat by weakness of the muscles, especially the deltoid, which is very apt to suffer, and sometimes to atrophy, from blows about the shoulder, and he was advised to use electricity. He did so, and now he informs me that he has derived decided benefit.

It is my belief that a *cuirass* bandage like this would form a much more effectual and comfortable treatment than any now in use for various other injuries in the vicinity of the shoulder; for fracture of the *neck of the scapula;* for dislocation of the *outer end of the clavicle;* for any fracture in the *upper fourth of the humerus:* for fracture *near the middle* of the clavicle, where there is a decided tendency to displacement, and where all apparatus frequently fails to keep the fragments in anything like perfect apposition, and particularly if any of these injuries be complicated by *delirium tremens*, or by *insanity*, or the patient should require removal by rail or carriage. No matter how heavy the apparatus may seem, it is comfortably borne, because the weight is so evenly distributed. As regards one at least of these injuries, dislocation of the acromial end of the clavicle, surgical writers have generally agreed as to the exceeding difficulty, if not impossibility, of maintaining the parts in perfect coaptation by any apparatus. The above bandage *must maintain* the parts in just the position in which they are held while the plaster is setting. Prof. Montgomery, of Buffalo, published a paper in the *Am. Journ. of Med. Sci.* for Oct., 1875, in which he maintains that Prof. Moore's cravat bandage for fractured clavicle is competent to retain a dislocated clavicle permanently in place. He gives instances from his own practice and that of others. I have used this simple and very ingenious contrivance for fractures, and like it very much, but should hardly expect so much from it in the other forms of injury as is claimed by Dr. Montgomery. Admitting that it has secured a perfect result in certain cases, nevertheless a slipping to a certain extent, or stretching, especially in the case of restless children or delirious adults, is very apt to occur, which, with the other apparatus, is impossible.

SARATOGA SPRINGS, June to Sept., 1875.

THE BOYLSTON MEDICAL PRIZES.—The Committee has announced the award of a prize of three hundred dollars to Dr. G. Gill Wylie, of New York, for a dissertation on "Civil Hospital Construction," and a prize of two hundred dollars to Dr. Mary Putnam-Jacobi, of New York, for a dissertation on the subject "Do Women require Mental and Bodily rest during Menstruation?"

STONE IN THE BLADDER,

ITS SPONTANEOUS EXPULSION AND ITS REMOVAL BY LITHOTRIPSY, LITHOTOMY, AND PERINEAL-LITHOTRITY, WITH AN ANALYSIS OF THIRTY-FIVE CASES; BEING AN ABSTRACT OF A PAPER READ TO THE MEDICAL SOCIETY OF THE STATE OF NEW YORK, JUNE, 1876.

BY J. W. S. GOULEY, M.D.,

PROFESSOR OF DISEASES OF THE GENITO-URINARY SYSTEM IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NEW YORK, SURGEON TO BELLEVUE HOSPITAL, ETC.

AN abstract only of the paper is here given, owing to its length, and because it will appear in full elsewhere. It contains a brief account of the genesis of vesical stones, of the treatment of nephretic colic, of the use of alkalies and other remedies in expediting the spontaneous expulsion of small calculi from the ureters and from the bladder, of the early detection of stone, and of the instruments best adapted to the purpose.

The writer considers that the time has arrived for lithotripsy to be adopted as the general operation in adult males whose urethræ are normal or can be rendered so practically; for lithotomy to be resorted to only in cases accompanied by narrow and undilatable urethral strictures, or by cystitis with uncontrollable vesical irritability, and in young children; and for perineal-lithotrity and its modifications to be reserved for cases of large stones.

A succinct account of these various modes of treatment of stone in the bladder is followed by a report of thirty-five cases, an analysis of which is here given.

The thirty-five patients suffering from vesical calculi who had come under treatment, ranged from two to seventy-four years of age.

In seven cases the stones were expelled spontaneously from the bladder.

Thirteen cases were subjected to lithotripsy.

Ten cases underwent lithotomy, and in five cases perineal-lithotrity was done. Thirty-three recovered and two died.

The seven patients whose calculi were expelled from the bladder were from twenty-five to sixty-two years of age.

They had all had from one to four attacks of nephretic colic, and five had already expelled calculi per urethram.

Two had urethral strictures; in one of these two calculi were impacted behind a stricture which had to be dilated before they could be extracted.

Two had prostatic hypertrophy, but the stones were finally expelled.

In one case the calculi were very small but numerous.

In one case there were ten calculi, the size of buckshot.

In one case there were four, one of which was equal in diameter to No. 15 sound, and weighed ten grains.

In one case there were two, both of which became impacted behind a urethral stricture, and were extracted with dressing forceps.

There was one in each of the three remaining cases, and in one of these cases the stone weighed ten grains.

The calculi were all of uric acid, and were expelled from the bladder in from one to thirty days or more after the nephretic colic.

The treatment consisted in the use of diluents and alkalies, cathartics, dilatation of the urethra, etc.

All the patients made good recoveries.

The thirteen patients subjected to lithotripsy were between the ages of 24 and 66; three were under 30; three were from 34 to 37; three from 48 to 60, and four from 62 to 66.

Eight of the thirteen had troublesome cystitis, with much vesical and urethral sensitiveness, which required prolonged treatment before the operation could be done.

Three had urethral strictures, which, however, yielded to gradual dilatation before the operation.

In five cases it was necessary to enlarge the meatus urinarius by incision.

Four cases were complicated with prostatic enlargement.

Two cases had before undergone lithotomy.

Two cases had already been lithotriptized.

The stone was small in two cases; of medium size in five cases, and exceeded one inch in diameter in four cases.

There were several stones in one case; four in one case; two exceeding one inch in diameter in one case, and one stone in each of the ten remaining cases.

Every case underwent the most careful preparatory treatment.

Four cases were cured in one sitting; one in three sittings; one in four sittings; four cases in five sittings each; one case in seven sittings, and one in twenty-four sittings.

One case was followed by a rigor after the first sitting; one case after each of the four sittings; while the remainder had no rigors at all.

In one single case did any of the sittings exceed five minutes, and that by one minute only. In most of the cases the sittings were of from one and a half to three minutes' duration.

The lithotrite was introduced twice in one sitting in three cases. In all the others the instrument remained in the bladder until from three to fifteen crushings had been made, when it was withdrawn not to be again used until the next sitting.

The intervals of time between the sittings varied from two to eight days, except in two cases, where they were extended to several months at the request of patients.

In no case did orchitis supervene.

No sitting has been followed by severe hemorrhage, and only in some of the patients of sixty and upwards has the urine been tinged with blood. Even in these cases the urine became clear within twenty-four hours.

No sitting has been followed by severe cystitis, on the contrary, after the second sitting the vesical irritability has usually so diminished as to render the subsequent sittings easy for the patient and for the operator.

Expulsion of detritus from the beak of the lithotrite was always effected to a sufficient extent to permit closure of the jaws, so that the urethra sustained no injury in any case during the withdrawal of the instrument. The detritus was spontaneously expelled with the urine in ten cases. Aspiration of the fragments was made in one case. In one case aspiration was used only during one sitting, the detritus having been expelled spontaneously afterwards. In one case all the detritus was removed by the lithotrite and by an evacuating catheter, as none could be expelled on account of vesical atony. Impaction of fragments in the urethra occurred in five cases, but caused little inconvenience in any case, as they were either very soon expelled or forthwith extracted. The amount of detritus gathered varied from a few grains to an ounce and a quarter. The most rigid after-treatment was enjoined in each case.

There has been no recurrence of the trouble in any case except one, in which calculi were periodically escaping from the ureters. This was the fatal case. One patient died, and the cause of his death was pyelonephritis, both kidneys and ureters being filled with small calculi. The operation had to be discontinued twice on account of the renal trouble, and death occurred about eight weeks after the suspension of the treatment.

Of the ten patients upon whom lithotomy was performed, one was twenty-four years old, and the others were all under ten years of age. The eldest of these was eight years, the youngest two years of age.

Three patients had troublesome cystitis.

One had urethral stricture.

The stone was large in one case, in the others it was of medium size and small.

There were three stones in one case; two in another, and one in each of the remaining eight cases.

Lateral perineal cystotomy was done in five cases.

Lateral section of the anterior half of the prostate, with cystectasy, was done in three cases.

The median operation was performed in two cases.

Fragmentation of the stone was necessary, before extraction could be accomplished, in one case, and in this lateral perineal cystotomy was done. Extraction was not attended with difficulty in any of the other cases.

There was no serious hemorrhage in any case.

The urine was passed at will, from the day of the operation, in four cases.

The urine flowed entirely through the urethra, from the eleventh day after the operation, in one case; from the eighth day in one case; from the fourth day in one case; time not stated in five cases.

In two cases all the urine, from the time of the operation, was passed at will and through the urethra, not a drop escaping by the wound. The wound was healed in twenty-eight days in one case; in twenty days in two cases; in fourteen days in three cases; in ten days in two cases; in seven days in one case; and the date of union of the wound was not stated in one case.

In one case a fistula still exists, through which a few drops of urine escape.

All the patients recovered.

Of the five patients subjected to perineal-lithotrity, one was seventeen, one thirty-seven, one sixty, one seventy-four, and one fifty two years of age. One had been lithotomized seven years before. They had all long been distressed with cystitis. In one case there were two stones, the four others had only one calculus each. In one case the nucleus of the stone was a piece of glass.

In all the cases the stones were large, the detritus weighing in Case I., twelve hundred grains; in Case II., four hundred and eighty grains; in Case III., two hundred and seventy grains; in Case IV., nine hundred and sixty grains; in Case V., four hundred and nine grains. They consisted all mainly of phosphates.

The perineal incision was made freer than usual, and the bulb of the urethra had to be divided for nearly its whole length in one case. (Case I.)

In two cases the incision was made in accordance with Dolbeau's directions, and the membranous portion of the urethra only was divided.

In two cases the bistoury was plunged, cutting edge upwards, into the median line of the perinæum, close to the anal margin, until its point entered the groove of the staff, and nearly the whole membranous portion of the urethra cut longitudinally from behind

forward, and the cutaneous incision was completed at one sweep in withdrawing the knife.

In one case, dilatation of the prostatic urethra and neck of the bladder was made partly with a two-bladed dilator, partly with the finger. Dolbeau's six-branched dilator was used in three cases, and the hydraulic dilator in one case.

Fragmentation was made partly with a fenestrated lithotrite, introduced through the normal route, partly with strong forceps passed through the artificial opening, in two cases. Dolbeau's and my own lithoclasts were used in the others.

The stone was hard in one case, and soft in four cases.

Exploration, as recommended by Dolbeau, with small lithotomy forceps, was made in all the cases, and in three instances the stone, being once seized, could not without difficulty, and twice not without considerable delay, be disengaged from the forceps.

Extraction of the detritus was, in all the cases, effected with the lithoclasts, with lithotomy forceps, and with the scoop.

In all the cases frequent vesical injections of cold water had the happy effect of bringing within reach large and small fragments, after the bladder had seemed free from calculous matter.

Contrary to Dolbeau's directions, the finger was a number of times introduced into the bladder, in every case without giving rise to the least untoward symptom.

The loss of blood did not exceed four ounces in any case.

In one case the urine was passed at will from the day of the operation; in one case within twenty-four hours thereafter, and in one case in forty-eight hours. In one case the urine dribbled from the wound for two weeks. In the fatal case the urine also dribbled from the wound, very little occasionally passing through the normal route.

The wound healed in two weeks in two cases. A perineal fistula was established as a precautionary measure against cystitis in one case.

Four patients recovered and one died in a week of pyæmia.

Progress of Medical Science.

Empyema and Thoracentesis.—In answer to a series of questions as to the treatment, causes, and sequelæ of empyema, Dr. Bowditch, of Boston, states that, although he cannot give the percentage of recoveries in his practice, he has up to this time performed thoracentesis 328 times, on 207 patients, and that none of his patients have died immediately, or in consequence of the operation. He explains the large number of deaths after the operation, in Europe, by the desire of the operators to do too much, and thus prolong the operation beyond the time proper for the patient. They desire to get out all the fluid that can be drawn. His own rule is to stop suction the moment the patient begins to suffer from *any uncomfortable* symptoms—stricture of the chest, severe harassing cough, etc. A mild cough is a favorable sign, as it indicates expansion of the lungs. This rule applies to all cases, whether serum, pus, bloody or fœtid fluid be found in the pleural cavity.

Dr. Bowditch asserts that nearly all children with empyema recover after thoracentesis. Adults with recent trouble are in a more favorable condition for recovery than when the disease is chronic. Sometimes after repeated operations phthisis is liable to set in. In such a case the repeating of the aspiration is a bad mode of proceeding. It is better, if after aspirating once, or at most, twice, a constant tendency to the re-accumulation of pus is found, to make a free and permanent opening. This may be made by means of a trocar and canula just large enough to admit the passage of a drainage-tube. Shorter canulas must be substituted for the one originally used, according as the cavity diminishes in size. A free incision is more painful, but is the better operation of the two. With regard to the subsequent treatment, as long as laudable pus is being thrown out, and the lung is expanding, and the patient is improving, Dr. Bowditch does nothing. He thinks that patients are often made worse by too much "washing out the cavity." If, however, the patient fails, has hectic, etc., he uses injections of warm water, which often produce the happiest results. He has not used carbolic acid, but thinks that it may be useful. Constant drainage is his rule. Where the fluid drawn is serous he prefers repeated aspiration to a permanent opening. If the serum be bloody at the first operation he never makes a permanent opening, for the case is then one of malignant disease. Empyema may occur in persons previously healthy; but a bad constitution is often at the bottom of the matter. As sequelæ, Dr. Bowditch has never met with Bright's disease or enlarged liver, but has met with tuberculosis and enlargement of the heart in a few cases. In these last cases, though the fluid did not re-accumulate, the lung never regained its free expansion, and after months of trouble the patients died suddenly with cardiac symptoms.—*Cincinnati Lancet and Observer*, June, 1876.

Transfusion of Blood.—Assistant-Surgeon Wood, U. S. A., reports a successful case of transfusion of defibrinated human blood in a case of tubercular phthisis. The patient was reduced to the last stages of exhaustion and emaciation, and it seemed evident that he could not live forty-eight hours longer. Nearly four ounces of blood were injected, when the patient complained of a sense of fulness in the head, and the operation was stopped. Just before the operation his temperature was 102⅘° F., pulse 105, respiration 34, and he was orthopnœic, and in great distress. Before two ounces of blood had been injected he felt relieved, and shortly after the operation his temperature was 101⅗° F., pulse 101, respiration 27; he was breathing more easily, felt quite comfortable, and his eyes, ears, and nose had assumed a healthier hue. The night-sweats, which had resisted all measures for their relief, disappeared on the third night after the transfusion, and the hæmoptysis, which had been very frequent, ceased entirely. He began at once to gain appetite, strength, and flesh. In less than a month he gained seventeen pounds in weight, and is increasing in weight at the rate of three-quarters of a pound daily. The dyspnœa is now insignificant, and the destruction of lung tissue seems to have been arrested.

The operation was one of remarkable simplicity. Seven ounces of venous blood were drawn from a man's arm into a mortar that was placed in a water bath and raised to a temperature of 105° F., after which the apparatus was allowed to cool down to 100° F., at which temperature it was kept during the operation. The blood was carefully defibrinated by a wisp of broom, and afterwards constantly stirred. The left median cephalic vein of the patient was then

exposed, and three ligatures placed around it, the distal one to prevent hemorrhage, the proximal one to prevent the entrance of air, and the middle one to grasp the nozzle of the syringe. A valvular incision was now made in the vein between the distal and median ligatures. A common hard rubber syringe was filled with the blood, its point introduced into the vein nearly to the proximal ligature, and enough of its contents forced out to deprive this portion of the vein of any air it might contain. The middle ligature was then tightened about the nozzle of the syringe, the proximal ligature was loosened, and the syringe emptied. The proximal ligature was now again tightened, the middle one loosened, and the syringe withdrawn to be refilled with blood. This process was repeated until nearly four ounces of blood had been injected. There were no troublesome symptoms after the operation, no phlebitis, no rigors, and no aggravation of the dyspnœa. The great beauty of this operation lies in its simplicity, no special or complicated apparatus being required for it.—*Chicago Medical Journal and Examiner*, June, 1876.

Foreign Bodies in the Air Passages.—Prof. Hamilton, of the Columbus Medical College, contributes a valuable paper to the first number of the *Ohio Medical Recorder*, in which he puts on record twenty-one cases of foreign bodies in the air passages. He divides his cases into three groups. The first group comprises four cases. In one, part of a grain of wheat was drawn into the air passages; in one a piece of privet leaf, and in two, bits of peanut shells, and in all four cases the foreign body was removed in a coughing fit. These cases emphasize the following point, viz., when the foreign body is known to be quite small or soft, flat and irregular, so that it is susceptible of being further softened, and enveloped by the viscid secretion of the air passages, it is so slightly irritating, and so well adapted for spontaneous expulsion, that an operation is inadmissible.

The second group comprises two cases, in which the body was irregular, and its movements and relations could not be well estimated. In one case, the patient, a child, died suddenly with croupal symptoms, and a piece of a hickory nut shell was found in the larynx at the post-mortem. In the other a pregnant woman inhaled a shirt button with a pin stuck in it. No marked symptoms were excited, and, after a few weeks, the button was coughed up, followed, after a few months by the pin.

The third group includes fifteen cases. In all of them the foreign body was hard, smooth, and round in outline; in one it was a grain of pop-corn in its natural state; in one a locust seed; in three a large full bean; in three a water-melon seed; in six a grain of common field corn, all dry and hard, except one, which was a grain of roasted green corn. In three of these cases no operation was performed; one of these patients died of broncho pneumonia in seven days, and the other two coughed up the foreign bodies after several weeks, and recovered. In the remaining twelve patients there were thirteen operations, the foreign body being found in most cases at rest in the right bronchus, never fairly in the left. In six cases the body was expelled at once, and in the rest within from one to seventy-two hours. Where the body remains without motion in the bronchus after the operation, Prof. Hamilton advises that the patient be kept within reach, for sooner or later some movement will put it in motion, and then on simply dilating the opening expulsion will take place. One case died of broncho-pneumonia which had existed before the operation. In three cases laryngo-tracheotomy was performed, followed by impairment of voice in two, and the same result followed one of the tracheotomies. The patients were all under seven years of age, and the foreign bodies had been in the air passages from two hours to ninety six days.

On adding these fifteen cases to a number of cases tabulated by Dr. Weist, of Richmond, in which the foreign bodies were similar to those in our third group, we find that out of forty-five cases treated without operation, fourteen, or thirty-one per cent., died, while out of forty-six treated by operation, twelve, or twenty-six per cent., died; a difference of five per cent. in favor of the operation. These figures prove the incorrectness of the opinions so widely spread among medical men that foreign bodies in the air passages absolutely demand operation, and that the cases are of such emergency as to preclude sending a long distance for competent surgical aid.

Prof. Hamilton, for obvious reasons, opens the trachea above the isthmus of the thyroid gland, and divides usually four of the tracheal rings. Where this cannot be done without injuring the isthmus, he divides the cricoid cartilage and part of the crycothyroid membrane, which, however, is almost necessarily followed by impairment of voice.—*Ohio Medical Recorder*, June, 1876.

Chloral as an External Application.—The disinfecting properties of chloral are often utilized in the treatment of wounds, or of cavities containing fluids that have a fetid odor. M. Sivedey adds to it tincture of eucalyptus, in the following proportions:

℞ Tincturæ eucalypti.
Chloral hydrat.....ãã ʒ i.
Aquæ.....Oi.

This solution is very useful when employed daily as an injection in cases of empyema, of cysts that have been punctured, and in all other analogous cases.—*Journal de Méd. et de Chir.*, May, 1876.

Excision of the Knee and Amputation of the Thigh for Disease of the Knee-Joint.—At the last meeting of the Philadelphia College of Physicians, Dr. John Ashurst read a most interesting and valuable paper on the above subject. The paper began with the histories of ten cases of excision and five of amputation, all performed by Dr. Ashhurst himself. Excision was performed three times for arthritis with partial anchylosis, twice for arthritis with abscess, once for arthritis following small-pox, and four times for gelatinous arthritis. Nine of these cases have recovered with useful limbs, one however still wearing a splint, as the operation was but recently performed, and the tenth case is convalescent and promises to have as favorable a result as the other nine. Amputation of the thigh was performed in five cases that did not admit of excision on account of the extent of the disease or of visceral complications. One of these cases only proved fatal. This patient was fifty one years of age, and a man of intemperate habits; and the operation was performed for acute destructive inflammation of the knee-joint following an injury to the leg. In all the other fourteen cases the arthritis was chronic, and the patients were between five and eighteen years of age.

After concluding the account of this remarkable series of cases, Dr. Ashhurst put his remarks in the form of answers to the following questions:

I. When should the surgeon abandon expectant measures in the treatment of knee-joint disease, and what may be considered the indications for a resort to operation?

II. Operative interference having been resolved upon, how shall the surgeon decide between excision and amputation?

III. When an attempt is made to save the limb by excision, how shall the operation be performed, and what shall be the after-treatment?

I. In answer to the first question it must be premised that most cases of inflammation, even of the larger joints, dependent on blows, sprains, or internal causes, are amenable in the early stages to treatment by rest and extension. Unfortunately, however, the case often appears at first so trivial that it is neglected until it is too late for the above treatment to be efficacious. Of the ten cases of excision reported above, in only one had the disease lasted less than one year, the duration ranging in the other cases from one to six years. Dr. Ashhurst does not deny that some of these cases might ultimately have got well without an operation, but the limbs secured by the operation were immeasurably better and more useful than the withered and deformed limbs resulting from the so-called spontaneous cures. In deciding on the propriety of an operation in any particular case, the age and general condition of the patient, and the duration and stage of the affection, must be considered. Excision of the knee is not very successful in children under five years of age: these suffer more from the confinement than older children, and, Dr. Ashhurst thinks, are also more liable to the insidious development of tuberculous and other constitutional diseases. In persons past the prime of life excision of the knee is so fatal, that it should be entirely discarded, and amputation resorted to where an operation is absolutely indicated. The most favorable age for excision is from five years to puberty.

The presence of visceral disease, as a rule, positively contra-indicates excision. An operation is seldom required in recent cases, in which rest, extension, and proper constitutional and local treatment will usually effect a cure. Dr. Ashhust maintains that these chronic joint affections, though unquestionably local diseases, are not of exclusively local origin, and that they require constitutional as well as local treatment. Finally, no operation should be performed as long as the disease is confined to the synorial membrane, or, even when all the tissues of the joint are involved, as long as the integrity of the part is maintained and a hope of preserving a useful joint remains. "But when the relaxed condition of the joint and the occurrence of consecutive dislocation show that the crucial ligaments and semilunar cartilages have disappeared; when the limb is contracted and helpless, and the patient gives a history of repeated relapses from comparatively slight injuries; or, on the other hand, when the doughy semi-elastic character of the swelling shows the existence of gelatinous arthritis (the typical 'white swelling' of the older writers), an operation may be properly resorted to, even if the limb be at the time in a quiet condition. When in addition the joint is in a state of suppuration, and still more if there be caries of the articular surfaces, an operation may be considered (other things being favorable) as almost imperative." The operation may be performed comparatively early in cases of gelatinous arthritis in which there is hardly any tendency to spontaneous recovery.

II. Amputation should be performed in preference to excision when the patient is too young or too old, when there are visceral complications, when the disease is too extensive to allow of its entire removal without taking away so much bone as would materially impair the usefulness of the limb, and when the question of the time required for recovery is important.

III. In performing the operation of excision, Dr. Ashhurst prefers the transverse incision across the front of the joint, just below the patella. He dissects back the skin and superficial fascia to the level at which he means to use the saw, then cuts directly down to the bone, and removes condyles, patella, and the diseased tissues together. The bones are divided from below upward by means of a Butcher's saw with blade reversed. The femur, in order to retain the natural inclination of the limb, should be sawn in a plane which as regards the axis of the femur is oblique from behind forwards, and from within outwards. The tibia should be sawn in a plane transverse to its long axis, with a slight antero-posterior obliquity. The epiphyseal junctions should not be interfered with in children; it is sufficient to remove a slice half an inch to an inch thick from the condyles, and less from the tibia. Any shreds of disorganized tissue may be cut away, but the floor of the wound must be left intact. The patella should always be removed. Tenotomy of the hamstring muscels may be necessary before the limb can be brought into position. Before the patient emerges from the anæsthesia, a posterior splint, bracketed opposite the knee, to allow of daily dressing of the wound, should be applied, and left undisturbed for at least a fortnight, and better still for six weeks, at the end of which time the process of bony union will be well advanced. A straight position is the best for the limb, on account of the shortening produced by the operation.

"Bruit de Galop" in Bright's Disease.—There is at present in the wards of M. Siredey, at the *Hôpital Lariboisière*, a patient who when admitted was suffering from an almost complete paralysis of the left arm and leg. Auscultation revealed a well marked "bruit de galop" at the apex of the heart. The urine was clear and abundant, but contained a large quantity of albumen. The diagnosis was Bright's disease, with interstitial nephritis. The point of greatest interest in this case was the auscultatory sign, which had first pointed to the true diagnosis. The two normal heart sounds preserved their ordinary characters, while the abnormal sound preceded the first sound by a very slight interval. In character it was much duller than the first sound of the heart; it was a shock, a sensible impulse, and could hardly be called a sound at all; it was felt rather than heard when the ear was laid on the patient's chest. It was perceived most distinctly in this case just above and to the right of the apex of the heart, but it can sometimes be heard over the entire præcordial region. Added to the two normal sounds, this one constitutes the peculiar rhythm to which the name "bruit de galop" has been applied. M. Potain has ascertained that it has been associated in all the cases reported as yet with the interstitial form of Bright's disease, coinciding with the cardiac hypertrophy that is so often present in that disease. In one case, however, it was present though there was no hypertrophy. In interstitial nephritis, moreover, we meet with lesions of the arterioles, as well as of the aorta and larger arteries,—lesions which affect seriously the circulation, and have probably some influence in producing the "bruit de galop."

As a diagnostic sign of an obscure kidney disease this bruit may attain great importance. Interstitial nephritis is often very slow and insidious in its evolution, exciting none of those symptoms that mark out so clearly the course of a catarrhal nephritis. The patient may be quite well, or may complain only of some vague and slight symptoms, until a sudden attack of dyspnœa, or palpitation, or a pulmonary or

cerebral hemorrhage occurs, without any apparent cause. M Potain has several times diagnosticated this condition of the kidney early in its course from the presence of the "bruit de galop," and if we have reason to hope that as we can recognize the kidney disease and its accompanying cardiac hypertrophy so early, we may also be able to arrest their progress by appropriate treatment. In one of M. Potain's cases, that was already far advanced, a notable improvement was brought about by the use of cups to the lumbar regions, derivatives, purgatives, and a milk diet. The albumen disappeared from the urine, the "bruit de galop" gradually disappeared, and the hypertrophy of the heart diminished, until its volume was little larger than normal.—*Journal de Méd. et de Chir.*, May, 1876.

A Case of Purpura; Death from Cerebral Hemorrhage.—On the 24th of last March, a shoemaker, aged 19 years, entered Hebra's wards, in the general hospital at Vienna. Three days before he had noticed some red spots, which soon became bluish and then brown, on his cheeks and breast. These spots increased rapidly in number, and on his admission they were abundant on the thorax and extremities, individually of small size, and did not disappear on pressure. The gums were pale, presenting but a few ecchymoses, but were not swollen. The urine was dark colored, and contained albumen and a large number of red globules. The patient stated that he had always lived under good hygienic conditions, and complained only of a slight degree of prostration. Two days passed without any change, out on the morning of the 27th his articulation became embarrassed, and soon after paralysis of the right side of the face and the right arm set in. In the evening he vomited a good deal, and after some hours of quiet sleep he fell into a state of colapse, which lasted until his death, at six A.M. on the 28th of March.

At the autopsy, a clot the size of a walnut was found in the anterior lobe of the left hemisphere of the brain. Microscopical examination revealed a pretty marked fatty degeneration of the arterial tunics of the vessels of the part, and a similar alteration of the capillaries in different parts of the encephalon. The serous membranes, especially the peritoneum, were sown with ecchymotic spots, some as large as the palm of the hand. The heart, muscles, and subcutaneous cellular tissue presented likewise numerous ecchymoses. The mucous membrane of the stomach was swollen and infiltrated with blood, and its epithelium was cloudy. The liver presented yellow spots here and there, and was also fatty; the renal epithelium, the muscles, and the heart were in the same condition. The blood was not coagulated, and the white corpuscles were increased in number, and were granular and fatty.

This case formed the subject of an interesting discussion at the Vienna Medical Society, in the course of which Professor Heschl asserted that it was a case of phosphorus poisoning. Professor Hebra reminded him that the chemical examination of the stomach and its contents, by Professor Hoffmann, failed to reveal the presence of free phosphorus or of phosphoric acid, and that there was nothing in the antecedents of the patient to support the theory of suicide or of a criminal poisoning. M. Lereboullet, in reviewing this discussion, points out, moreover, that the symptoms were not those of phosphorus poisoning. Cerebral hemorrhage may be the consequence of phosphorus poisoning, but it is only exceptionally so, while, on the other hand, it has been frequently met with in fatal cases of purpura, many of which are to be found in French medical literature. A case reported by M. Boucher, in 1867, presented not only a large hemorrhagic effusion into the left middle lobe of the brain, but also degeneration, fibroid and fatty, of the walls of the vessels, a steatosis of the liver, and marked alterations in the kidneys. M. Lereboullet concludes, then, that Prof. Hebra's case must be classed as one of purpura hemorrhagica, which, however, he admits to be an unsatisfactory term, as it designates only an assemblage of symptoms and not a disease as an entity.—*Gazette Hebdom.*, May 12, 1876.

Croton Chloral Hydrate as an Anæsthetic.—At the meeting of the *Société de Biologie*, on the 6th of May, M. Chouppe communicated the results of his experiments with croton chloral as an anæsthetic, and summed up as follows:

1. The hydrate of croton-chloral, when administered by intravenous injections, produces anæsthetic sleep much more rapidly and in smaller doses than the hydrate of chloral. As far as the effects of two substances can be compared on two different individuals, fifteen grains of croton-chloral produce the same anæsthetic effect as forty-five grains of chloral.

2. The anæsthesia is as profound as that produced by chloral.

3. The intravenous injections of croton chloral seem to be less dangerous immediately than those of chloral, but M. Chouppe could not yet speak of the ulterior effects.

Mr. Trasbot stated that he had often found pulmonary hemmorhages in horses after intravenous injections of chloral or of chloroform. Mr. Galippe called attention to a recent statement of Liebreich's that chloral produces anæsthesia of the head before the rest of the body, and that it is always more marked there.—*Gazette Hebdomadaire*, May 12.

Vaginal Urethrocele.—In the number of *The Lancet* for October 30th, Mr. Lawson Tait published the history of an interesting case of sacenlar dilatation of the urethra, and also an account of an operation that resulted in permanent cure. In concluding, Mr. Tait remarked that he knew of no parallel case being on record. M. Gillette, of Paris, however, claims that he described a similar case under the name of "urethrocele vaginale," in 1873, which case is reported at length in *The Lancet* of May 6th. The patient, a previously healthy woman, began about two months after her third confinement to suffer from some uneasiness and burning in micturition, and a slight sensation of weight in the region of the vulva. Soon afterwards she noticed that after each act of micturition, especially when she was obliged to retain the erect position, there would be an involuntary discharge of a small quantity of urine, which, however, was not attended by the burning pain that accompanied the voluntary discharge. This discharge took place also during the sexual act. Vaginal examination revealed an ovoid tumor (bosselure) about one and a half inches long by one inch wide, projecting into the vagina just behind the urinary meatus. Pressure on the tumor caused the escape of some urine from the meatus, and a female catheter introduced into the urethra was arrested in a cavity, and its point could be readily felt through the walls of the vagina. On pressing it onwards it entered the bladder, which presented no displacement. In compliance with the urgent desire of the patient a surgical operation was undertaken for the relief of the incontinence. A triangular piece of the mucous membrane of the anterior wall of the vagina was dissected out, the urethra being avoided, and the lips of the in-

cision were then brought together by the continuous suture. The operation has relieved the patient entirely of her distressing symptoms, but it is of course as yet uncertain whether the cure will be permanent.

In commenting on this communication, Mr. Tait, while admitting its value as a contribution to our knowledge of urethral diseases in the female, denies that the case is "very similar" to his own. The clinical features of the two cases are very different, and in his case the tumor, which was the size of an egg, could not be described by the word "bosselure." This tumor communicated with the urethra by a very small opening, only large enough to admit a No. 9 or 10 catheter, while from the above description it is probable that in Mr. Gillette's case there was general dilatation of the coats of the urethra. The difference is very much like that which exists between an aneurism formed by rupture of the middle coat of an artery, and one formed by dilatation of all the coats. M. Gillette's operation would have been useless in Mr. Tait's case.—*The Lancet*, May 6th and 20th.

Boracic Acid as a Dressing for Wounds, etc.—This acid has been introduced as part of Lister's antiseptic treatment, but Dr. Cane, of London, uses it also as a simple dressing, and finds that it is an excellent substitute for the antiseptic dressing, which cannot be generally employed in private practice on account of the lack of skilled assistance. Recent wounds, both simple and contused, heal with wonderful rapidity under its use. Dr. Cane uses a saturated solution made with boiling water, and lints of cotton-wool soaked in this lotion and then dried, when the acid is copiously deposited in fine flaky crystals between the fibres. The wound is first washed with the lotion, and then a pad of dry lint folded three or four times is laid over it and kept in position by pieces of strapping. The lotion proved most serviceable in a case of phlegmonus erysipelas, the part being frequently bathed with the lotion and kept constantly wrapped in linen cloths wetted in the same. As a dressing for old ulcers of the leg the boracic lotion and lint are cleanly, and healing takes place rapidly under its use, sometimes succeeding when all other applications have failed. For boils on the neck and elsewere, the boracic lint is an excellent application; a piece large enough to hide the boil, covered with a piece of gutta-percha tissue, often gives great relief. A poultice made with the boracic lotion and Iceland moss is a capital and efficient remedy for carbuncles and other cases that require poultices. Lastly, the lotion and an ointment made by rubbing down one drachm of the acid with one ounce of simple ointment or benzoated lard, are often serviceable in pityriasis versicolor, tinea circinata, and other vegetable parasitic diseases.

Briefly to sum up the advantages of boracic acid—

1. It is an *antiseptic which does not irritate and inflame*, and so allows the natural processes of healing to go on without much interruption.

2. It is exceedingly simple in its application.

3. It can be used in the shape of lotion, lint, cotton-wool, etc., in combination with most other methods of treatment.

4. Its cost is trifling.—*The Lancet*, May 20th.

Tetanus following the Hypodermic Injection of Quinine.—Dr. Roberts, surgeon of the 9th Regiment of Sepoy Infantry, reports two fatal cases of tetanus following the hypodermic injection of quinine for malarial fever, both occurring in the same week. The first patient received an injection on October 15th, and one on the 16th, each containing three and a half grains of the neutral sulphate of quinine. The chills were arrested and the patient returned to duty six days later, but on the same evening he was taken with tetanic spasms, and died on October 25th. The second case received one injection of quinine on October 17th, which stopped the chills. He was discharged from hospital on the 24th, but on the morning of the 25th he complained of stiffness in the jaws and neck, and died at noon on the next day. These cases were treated with chloral, by the mouth and by hyperdermic injection, morphia, and chloroform. In neither case was there any trace of a lesion of a nerve at the site of the original injections. The doctor attributed the first case to rapid changes in the temperature, cases of idiopathic tetanus being not uncommon in some parts of India at the commencement of the rainy season; but with the second case the coincidence became so marked that he was obliged to admit the connection between the tetanus and the hypodermic injections. There was no evidence in either case that poison had been administered. The doctor had given quinine hypodermically some hundreds of times previously; had always taken it in that way himself, and the civil surgeon of the post had used it upwards of five thousand times, and in all these cases there had not been an authenticated instance of sloughing even, following this treatment. Why, then, should it produce tetanus in these two cases?—*The Lancet*, May 20th.

Vaso-Motor Centres and their Mode of Action.—Masius and Van Lair (Congrès de Bruxelles, Sept., 1875) agree with the theory of Goltz regarding the existence of vaso-motor centres. The conclusions to which they have arrived may be stated as follows: In a physiological point of view, the vaso-motor apparatus is constituted by two principal centres, and by nerve fibres, the greater portion of which unite the new centres with each other. The centres are the cerebro-spinal axis on the one hand, and, on the other, the mass of the nerve cells distributed to the periphery of the vascular system. The fibres of reunion are of two sorts. They are either vaso-constrictor, or vaso-dilator fibres, in part centripetal, in part centrifugal. The two varieties of vaso-motor fibres are often united in the same nerve trunk. The vaso-dilator filaments are usually, however, more active or in greater number. They relax the vascular parietes, diminishing the activity of the tonic centres. The vaso-constrictor and vaso-dilator fibres, which take their departure from the periphery, pass directly to the tonic centres, and these in their turn emit exclusively constricting fibres, which are diffused over the parietes of the vessels.—*Lo Sperimentale*, April, 1876.

Elephantiasis of the Nose.—Dr. N. Matteucci reports (*Bull. delle Scienze Mediche*) an interesting case of a voluminous elephantiasis of the nose successfully removed by Prof. Rizzoli. Very few cases of this deformity have thus far been observed. Three cases have been reported by Billroth, one by Gurlt, one by Barilli, and three by Vangel. The individual operated on by Rizzoli began to suffer from this disease at the age of forty-three. It commenced with the production of small tumors consecutive to an erysipelas of the face. He objected at first to an operation, and it was only when the deformity had progressed so far as to render him a laughing-stock to everybody, that he consented to its removal. There were a number of tumors, three of which were quite large, the total weight was 280 grammes. The diagnosis was soft fibroma of the derma and subcutaneous connective tissue in a condition of proliferation, with hypertrophy of the sebaceous glands. A perfect cure was obtained.—*Lo Sperimentale*, April, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, July 8, 1876.

THE NATIONAL MEDICAL LIBRARY.

From the time that the formation of a medical library in connection with the Surgeon-General's office was first conceived until the present, no pains have been spared to make it the leading one of the country. In this latter respect it has so far achieved its ambition that it has a just claim to change its title to that of the National Medical Library. All who are acquainted with the growth of this remarkable undertaking are aware that the credit of its success belongs to Assistant-Surgeon John S. Billings, who is still its responsible head. Devoting his whole time and energies to the perfection of the details of his office as librarian, he has made a National Medical Library not only a prospective possibility, but almost an accomplished fact.

The need of such a library cannot be questioned by any one interested in the progress of medical education, and in the proper and judicious development of our intellectual resources. Its location, which before might have been a question of jealous dispute with the different medical and literary centres of our country, is now settled by the circumstances of the remarkable success of the original undertaking. So far has this medical library distanced all others in the number and value of its volumes, that it is not only without a rival, but affords the profession the only hope, for years at least, of having anything to compare with it in completeness, systematic arrangement, and all those other qualifications which should make such a collection of standard and abiding value. Its location in Washington is, then, an accident to which the literati of distant parts of the country must become accommodated, and offset the apparent inconveniences of consultation from a distance by the wonderful facilities which otherwise would never have been offered. Washington, although the governmental seat, can hardly claim to be a literary centre; but still it is quite natural that all national enterprises should focus in the Capital, the conventional if not the actual head-quarters of the nation.

The independent right which Washington may claim for a library has been so unequivocally vindicated that it would be but the waste of words to advocate the claims of any other city. The mountain is there, and as it cannot come to us, we must consider how we can best go to it. We are ready to believe that every ordinary opportunity will be offered to students and authors for free consultation, and every effort made to reduce the difficulties of such consultation to that minimum consistent with the good to the greatest number. A foreshadowing of one of the intentions in this direction is the publication of the catalogue, a specimen fasciculus of which, prepared by Dr. Billings, we have recently received. The idea is to place in the hands of the medical men of this country a well-classified and complete list of the works in this wonderful collection, with the view of laying before them the resources of the library and of affording a very fair and remarkably complete exhibit of the bibliography of all the departments in medicine, from the most ancient time to the present. If we admit the importance of the library at all, the publication of its catalogue becomes a necessity for the development of its usefulness.

With a laudable desire for receiving suggestions in regard to the arrangement of this prospective catalogue, Dr. Billings has issued the fasciculus in question. The specimen submitted is of a combined catalogue of subjects and authors, arranged in dictionary order under a single alphabet. Although this plan is not without its disadvantages, it is practically speaking the best which can be adopted, especially in connection with the convenience of an anatomical classification. Such a general arrangement allows of the widest latitude for systematic detail, cross-reference, and precision, while at the same time the inconveniences of duplication are as much as possible avoided. The general alphabetical heads of the catalogue are conspicuously printed in large black letter, and subreferences and sub divisions in smaller varieties of type. Several styles are given, with a view to test opinion upon their respective merits. We think preference will be given to the arrangement of the general subjects in black letter, that of the authors of treatises in italics, and that of the authors of journal articles and pamphlets in small black letters, with the titles of their articles in nonpareil. The general arrangement of subjects would be almost beyond criticism, were it not that Dr. Billings adheres too absolutely in some places to the alphabetical standard of titles. For instance, there is an undue prominence given to "Account," which is out of all proportion to its value and significance as a titular heading. Under this caption we have titles of eight or ten entirely different subjects, which are buried in the small type and tucked away in the middle of a paragraph. But this is probably an oversight, and will be corrected and made to accord with the more practical aim of the

general work when the catalogue is ready to be printed as a whole. We have said enough of the value of this great library to make it unnecessary to urge upon our medical brethren every effort to increase its usefulness and perpetuate its aims. The publication of the catalogue being one of the means to that end, it behooves the profession of the country to give its hearty endorsement to the project, and to use its influence, individually and collectively, to secure the necessary sanction from Congress for its publication.

Reviews and Notices of Books.

A Manual of Diseases of the Eye. By C. Macnamara, F.C.U., Surgeon to the Westminster Hospital. Phila.: Lindsay & Blakiston. 1876. 12mo.

This work, having now reached its third edition, has fully established its reputation among ophthalmologists as a succinct and faithful guide in the practice of eye diseases. Although by no means voluminous, it treats in a general way of all the diseases of the eye and its appendages concerning which the general practitioner cares to know. It is avowedly nothing but a manual, is intended for nothing more, and as such takes the first rank. The arrangement of the subjects is very commendable, and a great deal of valuable information is crowded into a comparatively small space. Besides woodcuts, it contains several handsome chromo-lithographic plates.

Legal Chemistry. A Guide to the Detection of Poisons, Examination of Stains, etc., etc., as applied to Chemical Jurisprudence. Translated, with additions, from the French of A. Naquet. By J. P. Battershall, Nat. Sc. D. With a preface by C. F. Chandler, Ph.D., M.D., LL.D. N. Y.: D. Van Nostrand. 12mo.

As its title indicates, this work is intended as a guide to the chemical expert in the detection of crimes of murder, poisoning, etc. It is so purely technical, and implies such an amount of practical familiarity with the different methods of laboratory work, in the shape of scientific analyses, etc., that to the general practitioner it possesses only a nominal value. To such, however, as cultivate this specialty it is of special value, as compassing in a comparatively small space all the most improved and trustworthy methods of chemical analysis. The usefulness of the present edition is very much enhanced by an elaborate appendix, containing a list of the literature of toxicology and the allied branches. It is very creditably printed, and contains a number of handsome illustrations.

Surgery of the Arteries. Lettsomian Lectures of the Medical Society of London. 1875. By C. F. Maunder, Surgeon to the London Hospital, etc. Phila.: Lindsay & Blakiston. 1875. 12mo.

Mr. Maunder, in this little work, makes a very important contribution to practical surgery. Although made up of but three lectures (one on aneurism, one on wounds, hemorrhages, and antiseptic ligature, and one on ligature of the main artery, to arrest acute traumatic inflammation), the subjects of which they treat are so exhaustively considered, that they must be carefully studied to be appreciated. The lecture on aneurism, their different methods of treatment, by ligature, compression, etc., etc., is particularly worthy the attention of every practical surgeon.

The Student's Guide to the Practice of Midwifery. By D. Lloyd Roberts, M.D., M.R.C.P. Lond., Physician to St. Mary's Hospital, Honorary Fellow of the Obs. Soc. of Berlin, etc., etc. Philadelphia: Lindsay & Blakiston. 1876.

This manual, written for the instruction of students, may render valuable assistance to the busy practitioner. The author first gives an account of the anatomy of the organs of generation. The physiology of generation follows, and upon these pages are several illustrations, taken from Dalton. The mechanism of labor is spoken of as the basis of a scientific knowledge of the act of parturition, and is discussed in a clear and concise style. The illustrations are very good. Several pages are next devoted to the study of placenta prævia, signs and duration of pregnancy, abortion, diseases of the membranes and ovum, superfœtation, and extra-uterine pregnancy. This brings us to the stages and management of natural labor; and here we regret that the author regards the third stage as separation and expulsion of the placenta and membranes. We believe that it would be much safer to teach that the third stage of labor necessarily includes permanent uterine contraction.

After devoting a few pages to the consideration of the puerperal state, the author proceeds to the study of obstructed labor, protracted and hasty parturition, accidental hemorrhage, rupture of the uterus, and the induction of premature labor. He prefers Dr. Barnes' method in the latter instance. Operative midwifery is then discussed under the head of version, the use of the forceps, craniotomy, Cæsarian section, etc. The remaining portion of the book is devoted to the consideration of puerperal convulsions, puerperal mania, phlegmasia alba dolens, puerperal fever, thrombosis and embolism, and pelvic cellulitis and peritonitis. While presenting what he has to say upon this group of subjects, frequent reference is made to the views held by one of our own countrymen, Prof. Fordyce Barker, of New York.

The book is fairly illustrated, is of moderate size (300 pages), and is well written. It is also evident that the author intended to instruct the student, without confusing his mind with finely-spun theories and conflicting opinions, and in this respect he has given the student valuable assistance.

Archives of Dermatology: a Quarterly Journal of Skin and Venereal Diseases. Edited by L. Duncan Bulkley, M.D. New York: G. P. Putnam's Sons. 1875.

We have here the first volume of a quarterly devoted to skin and venereal diseases, which is in every sense a credit to American literature and deserving of extensive circulation. The general plan of the magazine is somewhat peculiar. There are original articles, clinical reports, and reports of societies, chiefly of the New York Dermatological Society. Then follows the digest of current literature, in which the various diseases are divided into different departments, each of which is taken charge of and the digest written by a collaborator specially fitted for the task. In this way every article published is mentioned, and the more important ones are submitted to analysis. By this means the reader has at his command a complete year-book, and by taking this journal alone can familiarize himself with everything done in the two specialties. In no journal in America has this feature been so thoroughly elaborated, and this alone will make it invaluable to

very many. Besides this analysis of articles and brochures, there are long analytical and critical reviews of the various larger and more important works, all written with great care by men well known and eminently fitted for the task. In the department of original articles we find the names of all the authorities of this country, with those of some foreign countries. In this department are many very valuable contributions which have already attracted much attention abroad. In the clinical department we find brief histories of rare and peculiar cases, without much comment, and certainly no one can peruse it without profit. Taken as a whole, the work is a very valuable one; and it is to be hoped it will meet with such a hearty support as will warrant its continuance.

Reports of Societies.

AMERICAN MEDICAL ASSOCIATION.

Section on Obstetrics and Diseases of Women and Children.

THE TREATMENT OF THE PEDICLE IN OVARIOTOMY.

This Section met on Tuesday afternoon, June 6; Chairman, Dr. Samuel C. Busey, of Washington, D. C.; Secretary, Dr. Robert Battey, of Georgia. The discussion was opened on the treatment of the pedicle in ovariotomy, by Dr. Dunlap, of Ohio, who proposed what he called division of the pedicle, first loosening the tumor from any attachment it may have formed, raising it from its bed, securing the pedicle so as to control the circulation, then cutting into the tumor, probably about one-half through, if not very large, saving enough peritoneum to have a long pedicle, severing the tumor, and enucleating the remaining portion of the sac, after the manner of Dr. Atlee. The bottom of the cup-shaped wound rests on the broad ligament of the uterus. After securing the vessels, pass four or five long loops of silk through the cut edges of the peritoneum, equidistant, and carry a curved metal speculum into the vagina by the side of the uterus, and against the bottom of this wound, making a small opening. The speculum should be placed either at the right or left of the ovary, not back or front of the uterus, and the uterus thus placed under control. Then plunge a small instrument through and pass it in a sufficient depth to penetrate the wound. Pass your loops of silk in the edges of this wound, and any ligatures you may have for securing the vessels down through the speculum, and by drawing on these loops you draw the peritoneum down to the speculum, which last you then withdraw, leaving the peritoneum inverted, and the wounded surfaces closely adopted to each other. A somewhat similar plan might be followed in the case of fibroid tumors. Deaths from ovariotomy seldom result from the mere operation, but from the presence of fluids in the abdominal cavity, either causing inflammatory action by their presence, or by their absorption producing septicæmia.

Dr. John L. Atlee considered that, in patients with a moderately good constitution, drainage tubes were not necessary; with a good atmosphere in such cases there was little fear of septicæmia. The less we meddle with the peritoneum the better. He had performed ovariotomy in 1843, and both his brother and himself had then been called butchers. His first case was one of double ovariotomy, and is still living. The great advantage of a clamp is that you leave nothing behind in the cavity of the abdomen. In one case—a tumor weighing sixty five pounds, with a very short pedicle—the wound opened after a violent fit of coughing, and the uterus protruded, and the cut-off pedicle sloughed off; since which time he has closed the lower part of the wound with a fine needle.

Dr. Dunlap stated that he had also been one of the earliest ovariotomists. The drainage tube should only be used where the peritoneum is wounded by tearing up the adhesion. His plan of operation left the parts entirely free from stretch or pressure. He had never found the functions of the uterus interfered with when the organ was held in that way.

Dr. Hodge, of Philadelphia, spoke of the more favorable termination of cases in private practice than in hospitals. He saw no advantages by the drainage-tubes, and considered them a source of irritation. While the fluid came out, there was an objectionable inlet for the atmosphere. He prepared his patients by preliminary strengthening treatment, and never operated when they were mentally depressed.

Dr. Atlee always purged his patients for a day or two before the operation, and then put the bowels in splints with McMunn's elixir, etc. He gave them afterwards plenty of ice or cold water.

Dr. Sims said that he had formerly tied the pedicle and dropped it inside, but death had in several cases occurred from hemorrhage. He had used the clamp very extensively for several years past. He did not believe that the proper principles of the action of the clamp were generally understood. The objection to the clamp is that the sloughing does not stop at the point at which the clamp restricts the pedicle. No man has seen the clamp separate and leave the wound smoothly healed. There is no adhesion at any other place than between the pedicle and the peritoneal lining of the cavity. If there are no adhesions the case can safely be left without drainage. In one case in which he supposed death had resulted from peritonitis, he found, on post-mortem examination, sloughing of the pedicle extending down an inch below the internal lining of the abdominal cavity. (Several other interesting and difficult cases were detailed in illustration.) Dr. Keith, of Edinburgh, is now using the actual cautery with great success, and Dr. Sims was coming to the belief that the actual cautery is the best method after all. The uterus must not be allowed to fall. Drainage can be effected through the cul de sac, or by a glass or silver tube. Nine tenths of the patients who die do so from septicæmia. There are objections to all the modes of drainage adopted. It would be well to combine drainage of the external wound with drainage of the cul de sac of the vagina.

Dr. Byford thought ovariotomy as practised is too complicated, and hence the occasionally bad results. Patients may die from the retaining of putrid material in the abdominal cavity, as well as from the absorption of granulous matter. He lost one third of his cases when he used the clamp. He had had excellent success with Dr. Dunlap's method. Drainage with a still tube was apt to press injuriously on the patient's intestines. He preferred drainage by the ligature, and was going to employ it universally hereafter.

Dr. Sell, of New York, alluded to the success of Spencer Wells with the clamp. A patient in bad health, with no preliminary treatment, will be likely to do badly under any method of treatment of the pedicle.

Dr. Washington L. Atlee preferred the clamp to any other method. Dr. Keith was very successful with the hot iron, but he is said to select his cases. A

short pedicle does not prevent the use of the clamp. The clamp excludes the dead tissues from the cavity of the peritoneum, keeps the womb perfectly quiet, and does not drag upon that organ or upon the pedicle. A pedicle thrown into the cavity of the pelvis has been known eventually to cause death by adhesion of the intestines. Great danger exists when the tumor itself adheres to the intestines. The tumor must be shelled out of its nest. A proper syphon must be employed in these cases. He had operated 340 times, 200 of which were with the clamp. About 70 per cent. recovered. If you pass a tent down well into the cul-de sac, and bring it out over the arch of the pubis, you will have sufficient drainage. He had sometimes employed three tents in different regions.

Dr. Garrish, of New York, referred to the necessity of putting the patient in a good hygienic condition before operating.

Dr. Page's uterine supporters.

On Wednesday afternoon Dr. R. C. Page, of Washington, described a form of uterine supporter applicable to cases attended with hyperæsthesia of the vagina or uterus, in which a hard material could not be endured. It was made of the finest quality of jewelers' cotton, with long fibre, firmly rolled on a curved rubber rod, and afterwards wrapped in the centre, producing a dumb bell form, with compact and elastic extremities, and a curved isthmus. It is introduced through the Sims' bivalve speculum, and is to be removed at night by the patient, who then takes a hot water injection; the pessary, or supporter, being kept all night in a solution of carbolic acid. The cervix rests on the isthmus of the instrument. The curve and size of the pessary may be adapted to the requirements of the case.

Galvano-cautery batteries.

Dr. Byrne, of New York, introduced several forms of batteries and galvano-cauteries, the plates being platinum and zinc, the fluid used being solution of bichromate of potash, or a little sulphuric acid and water, the latter being sufficiently strong for ordinary cases, the former being employed where greater power is necessary, as in cauterizing the stump of the pedicle. He alluded to the applicability of these instruments to the cauterization of the cervix uteri, cervical canal, and the urethra, in cases of chronic urethritis, and uterine and cervical catarrh. White heat should not be employed; hemorrhage would be more likely to follow. He generally occupied about twelve minutes in cutting through the cervix with the cautery. There should be no hemorrhage whatever, if rightly employed. He referred to the use of the cautery in connection with the clamp in treatment of the pedicle, a second clamp being employed after cauterization. In reply to numerous inquiries as to the applicability of this form of cautery, Dr. Byrne stated that he had not used it for venereal warts; that the pain following the removal of hemorrhoidal tumors was but slight, and easily controlled by a suppository, the patient walking about on the second day, whereas the operation by the ligature was often attended with three or four days of pain. There was a good deal of pain during the operation, but he usually anæsthetized his patient. At the conclusion of his remarks, a vote of thanks was tendered him for his interesting explanation.

Precocious development—early menstruation.

Dr. Marcy, of New Jersey, gave an account of the extraordinary development of a very young child, to which his attention had been called two years ago, and exhibited a photograph of the case. The pubic hair began to grow when she was nine months old. The mammary gland commenced to develop at the first month. She is very precocious intellectually. The vagina measures three inches in depth, and receives the right index finger without pain. The uterus is considerably larger than in its ordinary undeveloped state; there has been no menstruation.

An inquiry was made whether there was anything in the condition of the father and mother to account for it. The profession had bestowed too little attention on pre-natal causes. Might not an amorous or lascivious mother, for example, implant the same disposition in her child? Infants have been known to masturbate on the lap of the mother.

Dr. Sell reported a case which he considered much more developed than this: the "Baby Woman," exhibited by Barnum many years ago. He saw her at the age of three years. She commenced to menstruate at eighteen months, and did so regularly after two years and seven months. The mammary development equalled that of an adult. She was perfectly innocent, with no lascivious expression.' He had the child's age from the mother, not from Barnum. The child was examined by a medical commission.

Dr. Greene, of Michigan, mentioned the case of a young lady who commenced menstruating at three years of age, and died in child-bed at the age of twenty.

Veratrum viride in puerperal eclampsia.

At the meeting of the Section on Thursday afternoon, Dr. Burge, of Brooklyn, referred to the portion of Dr. Busey's address, as chairman of the Section, which alluded to the use of veratrum viride in puerperal eclampsia, and spoke of the satisfactory experience of practitioners of that city with it.

Dr. Hopkins was in doubt whether the remedy should be employed unless the pulse was full and hard.

Dr. Langhorne, of Virginia, advocated the use of the drug, having seen no evil effect from it.

Dr. Battey stated that in Georgia it was highly esteemed in the cases referred to. He would feel reluctant to prescribe it in half drachm or drachm doses, as had been suggested by some. It is not devoid of danger.

The remark was made by a delegate that the saturated solution could not have been the article administered in such doses. He never gave more than four to six drops.

Dr. Langhorne said a distinction should be made between Tilden's tincture, Norwood's, and that of the United States Pharmacopœia, and a large dose of even the weakest of these should only be given when the condition of the brain and nervous system or of the intestines indicated it.

Dr. Battey, of Georgia, reported a case of prostration from three-drop doses.

Dr. Fitch relied entirely on Norwood's tincture, varying the dose with the nature of the case. He gave five or six drops at first, every two or three hours, increasing by one drop until the effect was produced, and then decreasing.

Dr. Bennett, of Ohio, thought that attention should be paid to the fact that eclampsia occurs under very different conditions, requiring a difference of treatment. There may be cerebral hyperæmia or cerebral anæmia. Blood-letting may sometimes be necessary, rather than wait for the slower action of the veratrum viride.

Dr. Greene recommended the use of morphia hypodermically in these cases of eclampsia. He approved

of the use of the veratrum in puerperal fever, followed by administration of brandy and morphia.

Dr. Ohr, of Maryland, had treated every case with the lancet, and lost none; the patient being seated and bled until return of consciousness, and then delivered as rapidly as possible, the inhalation of chloroform being employed, if necessary. He had abandoned the use of veratrum viride. Their recovery to full strength was as rapid as though they had not been bled.

Dr. Jenks, of Michigan, had never used veratrum in eclampsia. We may have to act differently according as the convulsions occur, after or before delivery. In the epileptic form we may with confidence resort to chloroform; in the apoplectic, to the lancet.

Dr. Kerr, of Pennsylvania, thought that under any rational treatment the patients would get well.

CHLORAL HYDRATE IN PUERPERAL CONVULSIONS.

Dr. Eshleman, of Philadelphia, alluded to the use of chloral hydrate in puerperal convulsions, and of ether in puerperal cases. He had never seen convulsions in a patient treated with ether in confinement.

Dr. Didama, of Syracuse, had been able to prevent the occurrence of convulsions for two years past by watchful antecedent care and treatment of his patients.

Dr. Peaslee, of New York, had great faith in the lancet in cases of puerperal eclampsia; but chloroform is frequently indicated, with rapid delivery. It should not be mixed with ether. He never used the veratrum.

Dr. Sims had not had any recent experience with this class of cases.

Dr. Goodrich, of Minnesota, related several cases attended during pregnancy with a large percentage of albumen, all of which were bled and recovered.

Dr. Jennings, of Arkansas, had always bled, but had recently employed with it the bromide of potassium and chloral.

Dr. Busey, in reply to an inquiry of Dr. Fitch, stated that he did not wish to convey the idea in his Address that Goodell's method of correcting false presentation, or Parry's mode of correcting face presentation, was to be considered as meddlesome midwifery. [A motion that the portion referring to puerperal meningitis be taken up, so far as related to its epidemicity, was lost.]

Dr. Sims thought that many diseases followed, not the use of instruments, but because these were not employed when they should be.

PERSULPHATE OF IRON IN HEMORRHAGE.

Dr. Jenks considered the employment of persulphate of iron in hemorrhage as bad practice. The coagulated blood may produce septicemia. Rather than use uterine injections, he believed in the expulsion of the head, and compression and ice. The introduction of the hand into the uterus is a dangerous expedient.

Dr. Chadwick, of Boston, said the experience of prominent members of the Obstetrical Society of London, at a meeting at which he was present, was favorable to the use of the sulphate. The coagula should be washed out with some disinfectant solution, and septicemia would not follow.

Dr. Labarrie, of Kentucky, stated that tincture of iodine had been much employed in Louisville, introduced through catheters, with the nozzle-pipe closed to avoid passing the injection into the fallopian tubes. Ergotin, injected into the muscular tissue of the arm, had also been resorted to.

Dr. Fitch, of Illinois, prevented hemorrhage by anticipation; examining the history and condition of the case, he gives a full dose or two of ergot shortly before the delivery of the child, repeated if necessary. He assists the delivery power by grasping the uterus, keeping it contracted, and employing cord contraction with a pendulum movement. After delivery of the placenta he secures contraction of the uterus by pressure. In his view persulphate of iron injections were not necessary.

Dr. Wilson, of Pennsylvania, in a case of irrepressible hemorrhage, continuing several days after labor, had resorted at last to iodine. The uterus, although only three or four drops were injected, at once contracted, and remained so.

Dr. Sims did not think the sulphate of iron in hemorrhage was quite as popular in London as formerly, on account of the deaths from septicemia. In an alarming case in his own experience, he had wrapped cotton saturated with solution of the sulphate around a pointed piece of whalebone, and at once arrested the hemorrhage when it was introduced. Tampons should be removed as soon after the arrest of hemorrhage as possible. When you take away the cotton, as above described, you take away the greater part of the sulphate.

Dr. Sims was anxious that the treatment of the pedicle in ovariotomy should be the subject of the first day's discussion at Chicago, and he now threw down the gauntlet to the Dr. Atlee and other gentlemen for that purpose.

Dr. Busey's Address was then, on motion, refered to the Committee on Publication.

Dr. Garrish, of New York, referred to the desirability of inducing premature labor in cases of threatened convulsions, of physicians carrying with them in their practice a laryngoscope and ophthalmoscope, etc. The prematurely born child should not be dressed, but placed in a warm bath, and afterwards wrapped in cotton.

The Section then adjourned *sine die*.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, June 2d, 1876.

Dr Frank P. Foster, Vice-President, in the Chair.

ON THE PHYSIOLOGY OF THE BRAIN.

Dr. Eugene Dupuy delivered an interesting lecture upon certain points in the physiology of the brain, which may be summarized under the following heads:

First.—Nerve cells not only deserve attention as centres, but also as conductors. Hence the explanation of the fact that a lesion might be located far from the would-be centre of the localizers, and yet produce the same symptoms, and *vice versa*.

Second.—Nerve cells were not permanent. The only permanency about them was the power to develop properties—by heredity and by acquisition—hence the "suppliance theory."

Third.—In the experiments of Hitzig and others, the irritation by electricity did not act on the cortex, which was not irritable, but upon vascular nerves, which, from the pia mater at the spots where electricity generally gives rise to contraction, enter into the convolutions, either alone or along the blood-vessels, whose arrangements were peculiar, but which went beyond the thickness of the cortex, and the strands of nerve fibres, which, after forming the crura cerebri, distributed into the crown of Reil and the internal capsule, etc., were the continuations of the true spinal cord at

those points. A difference in the mode of supply of blood to the different territories of the cortex explained the difference in results obtained by irritation. (See Dr. Dupuy's paper in Soc. de Biologie of Paris, in *Gaz. Medicale de Paris*, 1875, pp. 376 and 600, and those of Roche-Fontaine, *id.* pp. 565 and 648.)

Dr. Dupuy believed that his vascular theory, advanced some time ago, derived support from the very recent researches of Brown-Séquard, Eulenburg and Landois, and others.

Dr. Mary Putnam-Jacobi suggested the following consideration in connection with Dupuy's statement regarding latent power in nerve cells. We were aware that it was impossible to entertain any idea without having first passed through a series of preparatory states of mind; that it was impossible to have an impression without being previously submitted to a number of impressions, which graded into each other according to a definite line of succession. The question then became, whether that succession of ideas or succession of impressions was connected with the gradual growth of ganglion cells, each group corresponding to an impression, or each one corresponding to a fragment of an idea or impression? If so, the psychological problem, practically or theoretically, was connected with the nutrition of the brain, with generation of the ganglion cells, which must be presumed to follow a definite line of descent and inheritance.

Dr. Dupuy stated that he would speak upon that point in a future discourse.

The subject of Dr. Dupuy's remarks was further discussed by Drs. McIlvain, Peters, Hamilton, and Foster.

Correspondence.

UNUNITED FRACTURE OF UPPER END OF FIBULA.

UPPER FRAGMENT DISPLACED BY ACTION OF BICEPS, AND CONSEQUENT INJURY OF THE EXTERNAL POPLITEAL NERVE.

Prof. Hamilton, to whom the history of the following case was sent, writes:

The case related in the accompanying note is of special interest. The fracture of both bones of the leg at this point is unusual. The refusal of the fibula to unite, on account of the contraction of the biceps, suggests the propriety of flexing the leg in treating such a fracture, or of dividing the biceps at once.

The hyperæsthesia, pain, and paralysis of certain portions of the foot is plainly due to some injury inflicted upon the external popliteal nerve, probably by the pressure of the upper fragment; and I have said to the doctor that the biceps ought to be divided, or the upper fragment of the fibula dissected. Yours truly,

Frank H. Hamilton.

43 West Thirty-second Street.

Prof. F. H. Hamilton,

Dear Sir:—Having sustained a fracture in my own person, resulting, in part, in non-union and slight deformity and disability, and not finding a record of any similar case in your Fractures and Dislocations, nor in any other work we have here, I have considered it of sufficient importance to communicate it briefly to you. The injury occurred by being capsized while riding in my covered buggy, and being dragged underneath it a short distance, my legs being on the ground wrapped in a buffalo-robe. When finally released from the buggy, I found I had sustained a fracture of the leg. It proved to be a transverse fracture of the tibia just below the tubercle, 2¼ inches below joint of knee, near attachment of the ligamentum patella, and of the fibula, about one inch below its head. It is nine weeks since the accident occurred. I am about on crutches, with a good tibia, but the deformity and disability consists in the fact that the superior fragment of the fibula, with the biceps attached, is drawn upward and inward, so that it lies across the under side of the knee. The head of the fibula seems to rest upon its articulating surface, while its inferior extremity is drawn upward and inward, and is loose and movable. This dislocation of the head of the fibula was not diagnosed at the time of dressing the fracture by the attending surgeon, and in fact I do not know that anything could have been done to overcome the power of the biceps on such a short fragment. The consequence is a loss of the fulness and prominence of the external hamstrings, and weakness of external part of knee, being inclined to easily turn out. The superior extremity, inferior fragment of fibula, seems to be attached by bony union to tibia at seat of fracture, having a depression between that and the superior fragment. I am able to rest my foot upon the floor, but bear no weight upon it. There has also been a paralysis of the extensors of foot and toes, with extreme sensitiveness or hyperæsthesia of dorsum of foot and toes, which still continues.

There has been no appearance of bruise or injury to the anterior surface of the limb, but my foot droops and toes drag. I have been led to communicate this to you from the fact that I could not find anything of similar kind recorded.

E. D. Merriam, M.D.

Conneaut, Ohio.

SALICYLIC ACID IN RHEUMATISM.

To the Editor of The Medical Record.

Dear Sir:—I have noticed with renewed interest the many reports of marvellous cures of cases of acute rheumatism by the use of salicylic acid, which you have from time to time published in your valuable journal, that I am almost inclined to believe, were it not contrary to my own experience, that this disease was really a funny thing to have, now that it is so easily controlled. Everybody, it seems, in the practice of medicine, is using this remedy. Every case that gets well, or is likely to do so, is immediately paraded in some medical journal as another evidence of the *specific* curative powers of salicylic acid. How many times it fails to accomplish the desired result, we know not; for, thus far, only successes are reported, whilst protracted cases and failures are forgotten. It must be, in these instances at least, that they were mild, uncomplicated cases; or that, perhaps, these sanguine writers may have been more favored than some of their rustic brethren, in having selected patients who would get well at all hazards (we mean to be charitable, you see); or possibly that we may have had the old fashioned, long-winded kind of cases away up here in Vermont, for which the late Dr. Warren of Boston would have prescribed as necessary for a cure "a red flannel shirt and six weeks' time."

We like to believe all we can in what we read; but, after much "cramming," we have oftentimes been reminded of the fable of "the toad and the ox," besides experiencing considerable difficulty in deglutition. But seriously, Mr. Editor, is it quite the thing to report

single cases as they occur in our practice, immediately they begin to improve, irrespective of any benefit to be derived from the clinical study of a large number? And is it honest to so isolate them, and because they may perchance speedily recover (some will, you know, get well quickly on almost any kind of treatment), to say nothing of those which run a protracted course? We think not; and it is with this feeling that we are induced to report the other side of the story. We mean to be honest and fair, and so unhesitatingly affirm that in some cases salicylic acid will seemingly do wonders. There are others in which it is of no apparent avail, having neither any particular influence in subduing pain and inflammation, nor diminishing the duration of the disease. Here the old remedy, tr. colchicum sem., will be the *sine qua non* for getting us out of a bad fix; at least it has proved so in our hands after failure in the use of salicylic acid.

We have varied our doses so that the quantity taken ranged from grs. v. to ʒij. every four hours. We have given as high as grs. xxx. every hour for six hours, then decreased the dose in the following manner: 30 grains every two hours for the next six hours; 30 grains every three hours for the next six; and finally settled upon 20 grains every four hours, finding that, in spite of the remedy, the disease still continued on. A week's trial not relieving the patient, there was added to the salicylic acid—which, by the way, was taken in capsules—tr. colchicum, sem., gtts. xv. every four hours; and during the second week the patient got better. "*Mirabile dictu*," the patient decidedly improved in two weeks! During the third he so far improved as to resume work, contrary to advice. After a few days of manual labor he gave up again, almost as bad as ever. An attempt was made to resume the salicylic acid treatment, but objection being made to it, the patient was finally placed upon other treatment, and now seems to be doing well.

In our other case the disease ran four weeks, regardless of the salicylic acid, of which there was taken 15 grains every four hours, from beginning to end. Here, then, are two cases in which salicylic acid was used, in both of which the effect, as far as marvellous results are concerned, is certainly not very flattering. It may be claimed that they are not fair tests. Perhaps they are not. In the practice of medicine we are unfortunately surrounded by just such cases—whatever the disease—in which such considerations as fairness should be no criterion of the true value of a remedy. What we want is *such a remedy as will induce relief in all kinds of cases*, if that is possible; such as morphia for the relief of pain, and quinia for chills and fever. If mild cases of rheumatism are benefited by salicylic acid, how much have we improved upon either acetate of potash and tr. colchicum sem.?

In the administration of this remedy we have found gelatine capsules far more convenient than any other form. We propose to continue its use, for we have found interesting features connected with it. In large doses, such as we have mentioned, tinnitus aurium, slight giddiness, and deafness have supervened, reminding one of the action of quinia. This was the reason why our patient refused to take any more. Another interesting feature was the profuse diaphoresis which it induced, with but slight alleviation of pain. In neither of them was there any particular irritability of the stomach, except a little nausea in one, which soon passed off, without change either in the dose taken or time of administering it being made. In neither was there any "constant burning pain," so frequently mentioned as experienced in the stomach.

It will be noticed that we have given no carefully prepared account of our cases; this we did not intend to do. As our experience was not flattering, we have merely called the attention of the profession to it, in hopes, by appealing to them, we may be enabled to ascertain whether they have had a like experience with ourselves, or whether, by actual observation and practical tests, they too "have found at last, as 'Stricker has intimated,' a real remedy for rheumatism." If their experience is in any wise similar to our own, please let us have it, that salicylic acid, as a remedy for acute rheumatism, may not rest entirely upon "humcombe." Very truly yours,

FRANK W. PAGE, M.D.

BRANDON, VT., June, 1876.

Medical Items and News.

DR. STROBRIDGE SMITH died at Wappinger's Falls, Dutchess Co., N. Y., on the morning of the 9th of June, 1876, from albuminuria. He was born at Crown Point, N. Y., in March, 1828, commenced the study of Medicine in 1843, and graduated at the Castleton Medical College in Vermont. After practising medicine in Ticonderoga for a period of three years he removed to New York City, and attended lectures at the New York Medical College, from which institution he received a diploma in 1855, and entered upon the practice of his profession in the City of New York, where he occupied several prominent positions, and enjoyed a large and lucrative practice. During the late civil war he was appointed Major-Surgeon to the 93d Reg. N. Y. S. Vols., and served with his regiment in Virginia. He was subsequently appointed Medical Director of a Division in the Army of the Potomac. As an honorable gentleman and skilful surgeon, he became a favorite of the commanding officer, and won the respect of all who knew him. After leaving the service he travelled abroad, and during his residence in Paris made a special study of diseases of the eye and ear. Returning to New York City, he continued the practice of medicine and surgery, but his health not permitting a residence in the city, he decided to remove to the country, and finally settled in practice at Wappinger's Falls, New York. Dr. Smith was a man of great integrity, superior general knowledge, sound professional principles, and his demeanor towards all was modest and unobtrusive. During his life he won the confidence of his patients, and also the most favorable opinion of all his professional brethren. His death will long be lamented by those connected with him in professional and social relations.

The following action was taken by the Dutchess County Medical Society, of which Dr. Strobridge Smith was a member, at a stated meeting held on the 14th day of June, 1876:

Resolved, That in the death of Dr. Strobridge Smith the Dutchess County Medical Society loses an efficient member, and the profession at large a physician and surgeon of extensive professional and literary culture and sound judgment,

Resolved, That we deeply sympathize with the relatives and friends of the deceased;

Resolved, That the corresponding secretary transmit a copy of these resolutions to the family of the deceased and to the New York medical journals, to the *Wappinger Chronicle* and the *Fishkill Journal*.

JOHN H. DOUGHTY,
N. M. VAN KENNON,
W. J. CONKLIN.

Medical Congress of Seville.—The *Cronica Oftalmologica* contains an account of the proceedings of the Medical Congress which met recently at Seville, the first reunion of the sort that has taken place in Spain. Papers were read on "The Mineral Waters of Andalusia, and their Use in the Treatment of Skin Diseases;" on "Phthisis in Andalusia;" on "The Nature and Treatment of Puerperal Fever;" on "Cancer;" on "Scurvy;" on "The Treatment of Lachrymal Fistulas by Cauterization of the Sac;" on "Alcohol as a Surgical Dressing," etc. The importance and interest of these different papers afford a good augury for the next Congress, which is to meet at Granada in the coming year.

Commencement of Long Island Hospital, Brooklyn, N. Y.—The seventeenth annual commencement of this institution took place on the evening of June 22d, at the Athenæum, Brooklyn. The degree of Doctor of Medicine was conferred upon the following gentlemen:

Ransom W. Brown, D.D.S.; Alexander B. Van Wagner; John B. Zanparle; John B. Carder; F. E. West, A.M.; Charles A. Briggs; D. F. Brooks; A. O. Squier; J. R. Willis; F. C. Davis; A. D. Decker; John Avery; C. V. Hasbrouck; George F. Ketcham; W. F. McLean; H. H. Hahn, A.B.; John C. Fisher, A.B.; S. W. Meade; O. S. Brigham, Ph.B.; C. G. Brown, B.S.; B. F. Black; W. W. Baldwin; Wesley Sherman; F. J. Withington; A. O. Douglass; J. H. Trent; Alexander McMillan; Henry J. Hesse, A.B.; A. G. Heaney; G. G. Williams; L. A. Denton; C. A. Freeman; George W. Brush; A. D. McLaren, B.M.; D. F. Everts, M.D.; J. C. Davidson; A. C. Bolton; M. F. Bruce, A.B.; Solomon Merrill; E. R. Connell; T. H. Northridge; F. L. Gage, A.B.; R. R. Thompson; G. B. Ayres; J. W. Leadenham.

Prof. Rodman then presented a case of instruments to Mr. Henry Hesse, and a forceps to Mr. O. J. Brigham, they having been offered as prizes by Prof. E. S. Bunker for the best report of his lectures during the last session of the college.

The Hon. Joshua M. Van Cott then delivered the oration of the evening, his subject being the Legal and Ethical Standards of Professional Duty and Responsibility.

After the rendering of some music by the band, the valedictory was delivered by Mr. H. H. Hahn, A.B., M.D., of the graduating class, who was warmly applauded during his address. Benediction was then pronounced by Dr. Dixon, and the audience retired.

A New Journal.—Among our exchanges is *l'Année Médicale*, a new monthly journal, which is to be the organ of the Medical Society of Caen and of Calvados. The contents of the number before us are sufficiently varied and interesting. There is a chatty letter from Paris, giving a report of one of M. Tillaux's clinics at the Hôpital Lariboisière. Among the original articles is the report of a case of rachitic deformity of the pelvis in its conjugate diameter, necessitating the induction of premature labor. The patient had a rachitic history, but there was no deformity of the limbs. In the bibliographical department are short but very good reviews of Tillaux's Topographical Anatomy as far as it has yet appeared, and of Labbé's Surgical Clinics. In addition, the number contains a good many news items that are mainly interesting to the practitioners of its native district. In conclusion, we should add that the new journal seems to be ably edited, and we trust it will have a long and extended career of usefulness.

Maternal Impressions — Dr. G. H. Gray, of West Meriden, Conn., writes:—Dear Sir:—A rather peculiar case occurred recently in my practice. A little girl, playing near a bonfire, came too near the flames and her clothing caught fire, burning her so badly that she died from the effects the following morning. Her mother—who had just reached her full term of pregnancy—in trying to save the child was herself so badly burned about the hands as to render them both useless for the time.

All the women of the neighborhood were gathered, and almost the first question asked me was, "Will this mark the child unborn?" Of course I gave evasive answers, as I was doubtful if she could be delivered of a live child. To my surprise labor was rather retarded than hastened by the occurrence, the mother for forty-eight hours doing little but moving about helpless and despondent, and constantly moaning.

The child was born asphyxiated, but after strenuous and protracted efforts I was at last rewarded by a welcome cry. The curious part of it is, that from the moment of that first cry the child has hardly for an hour ceased uttering a ridiculous fac-simile of the mother's moans, and the old women declare this is the "mother's mark."

Scientific Careers.—M. Fremy, of Paris, the eminent chemist, thinks that he has discovered a means for winning back to the study of science those who now desert it for more lucrative pursuits. He proposes to create for *savans* a modest progressive pension comparable to that offered by the State to the soldier or the civil engineer. According to this project the scientific career is to comprise five grades. The *savans* of the 5th grade are to receive pensions of $600 per annum; those of the 4th grade, $1,000 per annum; those of the 3d grade, $1,600; those of the 2d, $3,000, and, finally, those who reach the first grade, $4,000. A special jury is to be appointed to determine the capacity of the young *savans*, and to propose them for advancement, according to the amount of real service that they have rendered to science. M. Fremy's plan is ingenious and captivating, but, unfortunately, in conceiving it he has given no thought to the many and apparently insuperable objections that present themselves to it.

Our Reports of Meetings of Societies.—The number of Medical Associations held during the past month has been so large that we experience the greatest difficulty in finding space for them. So far we have done the best we could under the circumstances, and shall endeavor to publish those still waiting for their turn as soon as the present crowded condition of our columns will permit. The summer vacation of the Societies, and the absence of more Society material, will make the fulfilment of this promise an early possibility.

False Certificates.—A. M. Boiron has just been condemned, by the Court of Assizes of Paris, to five years' hard labor for having procured false certificates by means of which he obtained admission to the Montpelier Medical College. He was about to pass his examination in the name and place of a certain M. Crespin who had gone to Spain.

Medical Students in Italy.—According to the *Bulletin Officiel de l'Instruction Publique*, 2,802 students have matriculated this year at the different medical schools in Italy. The medical school of Naples heads the list with 991 students; then come Turin, with 361 students; Padua, 251; Pavia, 250; Bologna, 176; Rome, 157; Genoa, 128; Pisa, 104; Modena, 78; Sienna, 69; Parma, 61; Palermo, 60, etc.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, July 15, 1876.

THE MAN AND THE TURTLE.

We have at length had an opportunity of bringing the ever-vexed question of the sea turtle, and how to behave towards him, to a plain issue. The result cannot but be regarded as a hopeful sign by all those who wish to see such subjects decided by the light of scientific investigation rather than by the testimony of partly-formed opinions or by individual sentiments, where ignorance or infatuation is pretty apt to play an important part. This case is an excellent exemplification of the ill-advised attempts of a certain class of persons to oppress the community by their views on questions of which they show themselves extremely ignorant. In their persistent efforts to accomplish certain objects they have set before them, they obtain letters and statements from well-meaning persons, who in a general way give their evidence that this or that way of treating the lower creation appears to inflict cruelty or suffering upon them.

This is as it should be, and those gentlemen of eminence among us who will volunteer testimony in such matters merit a large share of public esteem. Their statements, however, would hardly be regarded by the gentlemen themselves as of special value in individual cases, where they had not personal or practical knowledge. It was at this very point that Mr. Bergh's case was weak, and had indeed so little inherent strength, that it suddenly collapsed. According to *The Times* of July 2, 1876, Mr. Blackford, a fish-dealer of Fulton Market, was charged in the Court of Special Sessions with violating the law "in tying the flippers of turtles by means of strings or wythes passed through them, and by keeping the turtles lying on their backs while exposed for sale." Thirty-nine turtles were found at the place, all of them tied in the manner described, and all lying on their backs. The officer who found them "examined the perforations in the flippers of one of them, and found a quantity of clotted blood about the mouth of the orifice. On squeezing this part blood flowed out." Evidence was then introduced by Mr. Bergh to show that such treatment probably produced suffering, which doubtless few would be willing to deny. The defence then introduced Dr. Read, a well-known and prominent minister of the Baptist Church, and formerly President of Shurtleff College, Illinois. This witness narrated some experiments which he had instituted with turtles, having taken two of equal weight and subjected the one to the usual method of treatment, while the other was placed on his belly. At the end of a week the one placed upon the belly was weak and emaciated, and its flippers and undershell badly chafed. The other one was apparently in almost as good a condition as when he had taken it into his house. A number of other experiments were then narrated as to the quality of the respiration, desire for water, condition of the eyes, etc., all going to show that the position on the back, with the flippers pinioned, with a slight support under the head, was the best position for the animal. At the conclusion of these statements Dr. Read was cross-examined by Mr. Bergh, when the Court decided that the case should be dismissed.

It is an unfortunate thing for us that the great mass of our citizens are so busy about their own personal affairs that little time is left for public matters, even when questions of serious import for the general welfare are at stake. The result is, that almost any one who will take the trouble to interest himself in such matters will be virtually undisturbed, however wild or fanciful his ideas may be, unless perhaps he happen to encroach upon the interests of some influential association or some department of trade. And yet we have among us abundance of persons who could undertake the solution of many of these questions, and in a short time could give a showing of evidence that would be generally accepted as credible. In the absence of such testimony Justice sometimes miscarries.

In the present case all theories were at once disposed of by the quiet, methodical investigations of a single man. It is to be hoped that the case will prove a fruitful lesson to Mr. Bergh, and that he will appreciate the value of the evidence that has been brought against him.

We have no desire to throw ridicule upon Mr. Bergh or his Society, or to belittle their operations in mitigating unnecessary cruelty to animals; but it has long been apparent to many medical men, as well as to others of the community, that the practical enforcement of some of Mr Bergh's doctrines would not only be an unnecessary oppression upon business men, but might seriously obstruct the present progress of medicine. It is in this latter regard that the medical profession has persistently opposed some of his recent efforts, and we are thankful to say that they have been successful.

In the matter of marketable flesh and fish it is quite

evident that, apart from humanitarian considerations, the interests of the importer and market dealer lie with the turtle. That plan of carrying and caring for the animal that shall best conserve his comfort and well-being will also be the plan for the dealer to adopt, as in that way the animal will live longer, and therefore be longer marketable. It is interesting to know that the old plan, which doubtless has in a crude way been found best by the dealers, has also proved to be such by scientific observation. And here we should merely say to Mr. Bergh that in such cases the only way he can have of securing the verdict of intelligent opinion upon his side is by employing experts to conduct systematic comparative investigations upon the various treatments that are thought by him to be cruel and those that are thought to be the opposite.

Cruelty has its physical effects, which are capable of being registered by increase of temperature, quality of respiration, diminution in weight, strength, and capacity for life. These points deserve Mr. Bergh's respectful consideration. And it is proper that the medical profession should notify him that such are the methods in use among them in reaching conclusions on such matters. We can only sincerely hope that he will accept the suggestions in the kindly spirit in which they are given, and we may then perhaps have better ground for hoping that the "voice of the turtle," and other similar disturbers of our peace, will no longer be heard in our land.

ARMY STAFF RANK.

Those who have paid attention to the struggle for increased rank in the medical corps of the army will be relieved to know that something has at last been done in the shape of legislation. A bill has at length been passed having for its object the reduction of the number and the increase in the efficiency of the medical corps. The following are some of its generous provisions:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the number of assistant surgeons now allowed by law shall be reduced to one hundred and twenty-five; that the office of medical storekeeper is hereby abolished; that from and after the passage of this act, in addition to the grades now allowed by law, there shall be four surgeons with the rank, pay, and emoluments of colonels; eight surgeons with the rank, pay, and emoluments of lieutenant-colonels, to be promoted by seniority from the medical officers of the army; that this act shall not be construed to deprive any medical officer or storekeeper now in office of his commission in the United States Army."

Although some change has been made for the better, the law falls far short of an adequate provision for the medical staff. The reduction of the number of assistant surgeons is made on the score of economy, always an exceedingly good excuse for arbitrary and senseless law-making. This slight drawback to the efficiency of the corps is offset by the promotions which are allowed in the higher grades. Instead of two colonels, as formerly allowed, there are now four; and instead of two lieutenant-colonels there are now eight. Considering that only six colonelships and twelve lieutenant-colonelships were asked for, the concession on the part of the Legislature is far from being illiberal.

Although provision is made for promotion by seniority, we cannot see how it is to be efficiently carried out when there is no plan devised for the proper retirement of the old and used-up officers. But something has been gained, therefore let us be thankful.

PATENT RIGHTS IN MEDICINE.

We publish some letters in the present number concerning the question of Patent Rights in Medicine. As our remarks made on a previous occasion upon the subject were intended to open a discussion, we shall defer our comments until we have had a free expression of professional sentiment.

Reports of Societies.

AMERICAN NEUROLOGICAL ASSOCIATION.

SECOND ANNUAL MEETING.

Wednesday, June 7—First Day.

The American Neurological Association convened in New York City, June 7, 1876, and was called to order at 2 P.M. by the President, Dr. J. S. Jewell, of Chicago.

On motion, it was voted to dispense with the reading of the minutes of the first annual meeting.

Dr. E. C. Seguin, Secretary of the Council, read the Annual Report, which was adopted.

On motion, the Secretary was authorized to dispose of volumes of the Transactions remaining on hand, at cost price, to such of the members of the Association as might wish to purchase them, reserving twelve copies for the future use of the Society.

NOMINATION FOR MEMBERSHIP.

Dr. J. J. Mason nominated Dr. Eugene Dupuy.

The President appointed the following gentlemen as

COMMITTEE ON NOMINATIONS.

Drs. Webber, of Boston; Lente, of Cold Spring, N. Y.; Cross and Emerson, of New York City; and Shaw, of Brooklyn.

There being no further business before the Association, the first paper for the session was read by the President, Dr. J. S. Jewell,

UPON THE STRUCTURE AND FUNCTIONS OF THE GANGLIA UPON THE POSTERIOR ROOTS OF THE SPINAL CORD.

Dr. Jewell prefaced his paper with limited introductory remarks, in which the following items were

brought forward as having a bearing upon the prosperity of the Association. It was recommended, *First*, that the meetings, for many years, should be held in some one of the three or four largest seaboard cities. *Second*, that all business matters, as far as possible, should be referred to the Council, so as not to consume the time of the Association. *Third*, that during the next three or four years, the election of new members, whether active or otherwise, should be refrained from as far as possible; *i.e.*, until the Society had shown, by the character of its work, that it was thoroughly scientific and respectable. *Fourth*, that committees should be appointed whose duty it should be to report at subsequent meetings upon some specific subject. The members should feel sufficiently interested in their Association to report their best work at its annual sessions.

The doctor then proceeded to read his paper upon the subject announced. He first considered the gross anatomy of those ganglia, and considered their situation, size, shape, color, and consistence. From thence he passed to the consideration of certain questions relating to minute anatomy and function. Prominent among them were—

What were the peculiarities presented by the nerve-cells of which they were composed?

In what direction did their fibres pass?

What were their true function?

The conclusions arrived at by Dr. Jewell were mainly as follows:

The ganglia upon the posterior roots of the spinal nerves contained cells, which were peculiar, as compared with the cells either of the cerebro-spinal axis or of the sympathetic ganglia. They approached more closely those of the sympathetic, but differed from them chiefly in the fact of being much more frequently uni-polar. In the sympathetic ganglia the cells were usually bi-polar. Perhaps in a majority of cases the cells of the posterior ganglia had only a single process, but there were numerous exceptions in the form of apolar or embryonal cells. Both of the processes frequently took their origin upon one side of the cell, and made a partial or even two turns around it before making their departure. In most instances the processes were furnished with myeline. Occasionally the cells had two processes; one direct, the other spiral. The direct contained myeline throughout, the spiral exceptionally contained myeline, which could be seen only at some distance from the cell. The direction of the processes, almost without exception, was towards the periphery. There was no demonstrable connection between the sensory fibres and the posterior spinal ganglia. If there was any influence exercised over the sensory root by those ganglia, there must be some connection between them. Upon that point Dr. Jewell believed that he had had considerable light shed by the preparations made by Mr. R. W. Amidon, of New York, who, it would seem, had shown that there might be a connection between the cells of the posterior spinal ganglia and the sensory root.

Dr. Jewell further believed that he had demonstrated with tolerable certainty that if the sensory roots were divided peripherally to the ganglia, some effect was produced upon the muscles anatomically related thereto. That change consisted in slow atrophy of the muscular fibre, much slower than when the motor root alone was divided, and was not due to a descending neuritis. If the sensory roots were divided internally to the ganglia, no effect whatever upon the muscles would be produced. Whatever the function of the ganglia might be, it had reference to parts lying outside of the spinal cord, and was independent of it. They exercised a trophic influence over the sensory nerve-fibres, and the doctor believed that it was possible to afford some plausible reason why they were placed outside of the spinal cord; unlike the motor roots, which had their trophic centres in the cord. Dr. Jewell was of the opinion that the fibres in the sensory roots, which had been regarded as conductors of recurrent sensibility, came from the sympathetic ganglia, and had their trophic centres in those ganglia, and that they belong to the vaso-motor system, and should not be taken as part of the phenomena of recurrent sensibility. There was no such thing as recurrent sensibility as commonly understood. The paper being open for discussion,

Dr. Webber, of Boston, inquired how soon atrophy of the muscles followed division of the sensory roots.

Dr. Jewell replied that he had not been able to determine that point; and that the time had varied from six weeks to two or three months.

Dr. Webber asked whether there was any lack of reflex tonus which might account for the atrophy of the muscles after division of the sensory root.

Dr. Jewell replied that there had sometimes been slight loss of muscular tone, as indicated by lack of response to the electrical current.

Dr. Webber asked what the nature of the change was which took place in the muscles.

Dr. Jewell replied that there was simply diminution in size, and that atrophy of all the tissues found in the muscles occurred, whether properly muscular or not.

Dr. Webber remarked that it had occurred to him that, perhaps, the diminution in size of the muscles noted by Dr. Jewell, might be explained by the loss of exercise dependent upon loss of tonus in the muscle, and that this change was not analogous to the degenerative changes that followed injury to the anterior cornua of the cord. In one instance there was absolute degeneration, in the other simply loss of size.

Dr. Hammond, of New York, brought forward a single pathological circumstance, which might have some relation to the subject under discussion, and that was with reference to the disease he had called "progressive facial atrophy." As far as he was aware, no rational explanation had been given for the phenomena observed in that affection. He had had the opportunity to make histological examinations in one case, and had found marked diminution both in size and length of the muscular fibres, when compared with those taken from the sound side of the face. Might not that disease, then, be due partially or entirely to the fact that the Gasserian ganglion of the fifth pair was involved, according to the doctrine enunciated by Dr. Jewell? He was inclined to that opinion.

Dr. Jewell remarked, with regard to Dr. Webber's inquiry, that animals had been confined in a state of functional inactivity; and the changes found in their muscles compared with those found subsequent to the production of lesions in those nerves with which these were supplied. The result of the observation had been that degeneration took place, but not atrophy, or, at least, atrophy was not at all well marked. The change which had been noticed after division of the sensory root, was a perceptible diminution in size; but none, or but little, degeneration.

With regard to Dr. Hammond's suggestion, Dr. Jewell was of the opinion that if his observations proved to be correct, some light would be thrown upon the pathology of the affection to which allusion had been made.

Dr. Webber thought that dividing the sensory root and confining the limb were entirely different. A confined limb could not move, it was true, but reflex movements were continually going on, and the muscle received a good deal of the benefit following normal contraction.

In the other case, there was loss of sensibility which would very likely diminish the unconscious action in the muscles continually going on, and would place the limb in an entirely different condition, and a different result might be expected.

Dr. E. C. Seguin, of New York, inquired of Dr. Jewell whether there was any diminution of electro-muscular contractility.

Dr. Jewell replied that it had seemed to him there was.

Dr. Seguin remarked that he would apply that statement to the suggestion made by Dr. Hammond. He had been able to satisfy himself that the electro-muscular contractility, to the galvanic and faradic currents, was preserved intact in progressive facial atrophy: and that finding such reaction would separate the affection from that condition described by Dr. Jewell.

Dr. Seguin further inquired of Dr. Jewell whether any influence upon the vaso-motor system had been noted.

Dr. Jewell replied, frequently so, but apparently having no connection with the progress of the degeneration in the nerve or disorder in the muscle.

The next paper was read by Dr. J. C. Shaw, of Brooklyn, on

HYSTERICAL TRISMUS.

The chief point of interest in the paper related to the hypodermic injection of sulphate of atropia in the treatment of that affection. The doses employed varied in size from $\frac{1}{6}$ to $\frac{1}{60}$ of a grain, according to the effects produced. The doctor recommended its use with the qualification that small doses should be first employed, the effects carefully watched, and their size increased according to the requirements of each case. His case was treated successfully. The largest injection was $\frac{1}{6}$ of a grain, and the largest quantity of the atropia daily used was $\frac{1}{4}$ of a grain.

Dr. Shaw's paper being open for discussion, Dr. Seguin referred to the history of the case related by Dr. Shaw, and corroborated the statements made with reference to its nature, obstinacy and cure.

Dr. Seguin related the history of a case of spasmodic torticollis which had been nearly cured by the hypodermic use of atropia. The patient had submitted to a variety of treatment without benefit; but marked relief followed the second injection of $\frac{1}{60}$ of a grain of the sulphate of atropia, and at the end of two weeks only slight spasm was manifested. The spasm appeared in the afternoon, and the time for using the injection was to be changed to the afternoon instead of administering it in the morning, as had previously been done.

Dr. Jewell believed that hypodermic injection for the relief of pain or spasm should be as near as possible to the seat of the difficulty. The doctor directed attention to the beneficial effects attending the use of morphia and atropia combined in the treatment of cholera, cholera-morbus, obstinate vomiting, etc. In the treatment of cholera he had combined strychnine and caffeine with the morphia and atropia.

Dr. Webber remarked, with reference to the use of atropia in convulsive affections, that he had given it by the mouth with marked benefit. He had in a number of cases, however, noticed that the use of the remedy had been followed by a peculiar sense of weakness in the legs. So great had been the weakness in some instances that the remedy had been discontinued. It had occurred in one case where $\frac{1}{60}$ of a grain of sulphate of atropia had been taken three times a day for about a week.

Dr. N. B. Emerson, of New York, referred to a case of painful paraplegia, depending upon a malignant growth attached to the spinal cord, in which a combination of morphia and atropia was employed; but it became necessary to change the original proportions in the prescription, because the morphine habit was more easily acquired than the habit of taking the atropine.

Dr. J. J. Mason, of New York, presented a well-marked case of

HEMI-FACIAL SPASM

occurring in a man act. 30 years. The spasm commenced in the tongue, extended over the left side of the face, was first tonic and then clonic. The attacks had appeared annually; and had continued about one week. Each spasm had lasted about one minute and a half, and had recurred every four or five minutes during the entire time of the attack. In the intervals between the attacks, the patient had, to all appearances, been perfectly well. There was no malarial or syphilitic history. The first attack was in April, 1874.

Evening Session—First Day.

The Association convened at 8 P.M., and listened to a paper on

PARALYSIS FOLLOWING ACUTE DISEASES,

by Dr. S. G. Webber, of Boston. The paper contained the doctor's own observations and those made by other observers upon cases where paralysis, partial or complete, had followed acute diseases, such as cerebro-spinal meningitis, typhoid fever, variola, scarlatina, diphtheria, etc. He called attention to paralysis and allied affections not of cerebral origin, and endeavored to refer the clinical phenomena to definite pathological changes. A temporary suspension of function might explain some of the cases, and there might be slight change in structure, which disappeared as quickly as purely functional disturbances.

The following is a brief *résumé* of Dr. Webber's paper. There were many cases in which the sequel was so slight that it was impossible to decide where or what the nervous disturbance was.

There was a large number of cases of paralysis which were more severe and lasting than those; and, if grouped indiscriminately, there seemed to be a lack of order, but if classified, they would be found to fall each under its own proper pathological division.

There were many cases in which the lesion existed in the anterior cornua, because muscular atrophy was present, and there was loss of electro-muscular contractility. In other cases there might be sclerosis of the white columns, which could be determined by the attendance of appropriate symptoms. It was quite possible, in other cases, that there was only neuritis, and then there would be no spinal symptoms.

The paper being open for discussion,

Dr. J. J. Mason, of New York, remarked that he had been specially interested in the electrical reactions alluded to by Dr. Webber, and inquired if the doctor had been able to obtain that phase of degenerative reaction where the muscles of the extremities responded to less galvanic power, fewer elements, than was necessary to excite healthy muscles.

Dr. Webber replied that he had.

Dr. Mason remarked that he had never observed

such a phenomenon upon the muscles of the extremities.

Dr. Webber remarked that he had found it in cases where lesion of the peripheral nerves was present, and in one case of infantile paralysis.

Dr. Seguin referred to two cases belonging to the class contemplated by Dr. Webber's paper. One was a case presenting all the external features of progressive muscular atrophy following upon typhoid fever, and occurred in a well-developed and apparently healthy young man. There were no symptoms whatever, except those referable to mechanical disturbances resulting from affections of the muscles. Electrical reaction was not thoroughly studied, but sufficiently so to determine that response to the faradic current was absolutely lost. The case passed from under observation.

The second case was similar to the first, but had a different history and termination. The paralysis followed cerebro-spinal meningitis, and was soon complete, although the patient was apparently in good health. There was wasting of the muscles, chiefly peripheral, and most marked at the extremities of the limbs. There was absolute loss of electro-muscular reaction to the faradic current, but there was preservation of reaction to the galvanic current in the muscles of the forearm and a trace of reaction in the thenar and hyperthenar eminences of the hand. The thighs recovered spontaneously. The treatment consisted in the daily use of the galvanic current. During the second winter of the treatment, the faradic current was employed, because of the improvement in the muscles. Almost complete recovery had taken place. As a last resort, in order to obtain reaction to the galvanic current in the muscles of the anterior part of the leg, Dr. H. B. Sands, of New York, performed tenotomy of the tendo Achillis, and placed the feet in plaster-of-Paris dressings. The idea was to produce relaxation of the anterior tibial muscles, so as to enable them to respond to the action of the current. From that time onward there was steady improvement. The doctor was of the opinon that the lesion was in the anterior horns, and occurred during the spinal fever. Dr. Seguin also mentioned certain paradoxical phenomena observed with reference to electro-muscular reaction:

1. Recovery of voluntary control over the gastrocnemius without return of electro-muscular contractility.

2. Remarkable return of electro muscular reaction in the anterior tibial muscles without marked voluntary control. The special point of interest in the case was the relaxation of muscles secured by tenotomy in order to fully carry out the electrical treatment. That was done in 1872, and primarily for that purpose.

Dr. Hammond inquired of Dr. Webber what he supposed the lesion to be which gave rise, for instance, to paralysis following diphtheria, in those cases in which recovery took place?

Dr. Webber replied that there was probably some lesion of the nerves or spinal cord.

Dr. Hammond.—What lesion?

Dr. Webber referred to cases reported by Oertel and others, in which, after diphtheria, micrococci and minute hæmorrhages had been found in the spinal cord. Buhl had found micrococci and hemorrhages, which had given rise to pressure upon the spinal nerves, thus producing the paralysis. When the new growth ceased, there might remain sufficient of the new formation to produce permanent pressure upon the nerve. When such new tissue or material was absorbed, the nerve would return to its normal condition. So also in the spinal cord, if there was such lesion, the new products might undergo degeneration and disappear. If there was not extensive change, the paralysis ceased with the removal of the new product, but if too much change had been produced in the organic structure, the paralysis remained permanent. The locality and severity of the lesion regulated the recovery.

Dr. Hammond.—Then the lesion is not amenable to treatment by such medication as we have knowledge of at present?

Dr. Webber.—Probably not. In diphtheritic cases the treatment which would check the growth of the micrococci, such as used in the treatment of the diphtheria, would be proper.

Dr. Hammond remarked that he had asked the questions with special reference to a case which had been sent to him by Dr. Brooks, of Cleveland. In that instance, the paralysis followed diphtheria, and was complete. The doctor first entertained the idea that the patient was suffering from congestion of the cord, or acute spinal paralysis supervening upon the diphtheria, and accordingly administered ergot in large doses. The patient, however, grew decidedly worse, and atrophy of the muscles took place rapidly. Sensation was not impaired in the slightest degree. At the end of ten days, a change in treatment was made, and strychnia given in doses of one twenty-fourth of a grain, and gradually increased until one-sixth of a grain was taken three times a day. No physiological reaction was produced by the drug, but improvement was rapid, and the patient was able, at the end of one month, to walk without a cane. The doctor, finally, did not regard the case as one of spinal congestion, nor did he believe that it was one in which diphtheritic deposits had taken place in the spinal cord. He was inclined to regard it as a case not exactly in accord with those reported by Dr. Webber.

Dr. Webber remarked that it was quite possible the ergot had nothing to do with the getting worse of the patient, but that the increase of the difficulty was simply such as was not infrequently seen in that class of cases. In the same sense it might be said that the strychnia had nothing to do with the recovery, but that the patient had got ready to get well, and recovery ensued.

Dr. Seguin inquired with regard to electro-muscular reaction in Dr. Hammond's case.

Dr. Hammond replied that there was no reaction to either current.

Dr. Webber remarked that it must be allowed that if there was diphtheritic deposit in the spinal cord, or about the nerves, when the diphtheria disappeared the nerves might be restored the same as after injury from any other cause.

Dr. Hammond.—Yes; but in his case there was manifestly an affection of the cells of the anterior cornua. "I do not suppose," said the doctor, "that Dr. Webber wishes to be understood as saying that strychnia is not beneficial in the treatment of paralysis following diphtheria."

Dr. Webber.—No; but that, inasmuch as the ergot may not have been of disadvantage, the strychnia may not have been of advantage in the case alluded to.

Thursday, June 8—Second Day.

Afternoon Session.

The Association was called to order by the President, Dr. Jewell, and the minutes of the previous meeting read and approved.

The Committee on Nominations reported as follows:

For President—Dr. J. S. Jewell, of Chicago.

For Vice-President—Dr. F. T. Miles, of Baltimore.

For Second Vice-President—Dr. R. T. Edes, of Boston.

For Corresponding Secretary—Dr. J. J. Mason, of New York.

For Recording Secretary and Treasurer—Dr. E. C. Seguin, of New York.

For Curator—Dr. J. W. S. Arnold, of New York.

The report of the Committee was accepted, and the Recording Secretary instructed to cast the ballot of the Association in the affirmative for the gentlemen nominated.

Dr. E. C. SEGUIN, Secretary of the Council, reported that the resignation of Dr. Meredith Clymer had been received, and that the Council recommended its acceptance by the Association.

The report of the Council was accepted and adopted.

The next order of business being the reading of papers, DR. HAMMOND presented a communication upon

A HITHERTO UNDESCRIBED FORM OF MUSCULAR INCO-ORDINATION.

The patient was also presented, and was a boy æt. three years and ten months, apparently in good health; had not been subjected to exhausting disease; had no paralysis, no derangement of sensibility, no spasm, nothing indicating sclerosis of any part of the cord; no hereditary tendency to nervous disease; was perfectly straight when lying down; could sit without any indication of inco-ordination; could hear well with both ears; could use both hands with freedom when sitting or lying, and he could stand erect when he had his back supported; but the moment he attempted to walk, the head was turned towards the left side, the body stooped to the left, the left hand and arm were held close to the side and breast and were flexed, while the right was thrown out straight behind the body. The boy could direct his steps, but walked with the body and limbs in the position described. It had been supposed that the difficulty might depend upon irritation from congenital phimosis, and accordingly circumcision had been thoroughly performed by Dr. Sayre, of New York, but the intensity of the phenomena of the affection had gradually increased since the operation.

DR. A. MCL. HAMILTON, of New York, remarked that a number of cases, closely resembling the one exhibited, had fallen under his observation, in which adherent prepuce had been supposed to be the cause, but circumcision had not been followed by any benefit whatever.

DR. SEGUIN directed attention to the fact that the position assumed by the patient when walking was analogous to that seen in animals in whom the middle peduncle of the cerebellum was injured.

DR. DUPUY concurred in the opinion given by Dr. Seguin, and believed that there was, in the present case, lesion in the peduncle, between the cerebellum and pons; and that as soon as movement was attempted, there was a more marked contraction of the muscles upon one side than upon the other.

DR. HAMMOND.—But both arms are affected, the right as well as the left.

DR. SEGUIN.—But is not the right limb thrown out to balance the body.

DR. HAMMOND presented a *second* case, with the following history: The patient was thrown from a wagon four years ago, remained unconscious twelve days with a fracture of the skull near the posterior angle of the right parietal bone. He was paralyzed upon the same side. Two years after he came under the doctor's observation, and complained of vertigo, pain in the head, and epileptiform convulsions.

He was trephined, and had had no convulsions since, and the cerebral symptoms had disappeared. He came again with the complaint that he was entirely deprived of virile power. He had also some paralysis of the bladder, but that was improving, and there was some cystitis. How were his present symptoms to be explained?

DR. PUTNAM.—Was there marked depression at the seat of injury?

DR. HAMMOND.—There was, and several loose fragments of bone were removed.

DR. SEGUIN.—What was the condition of the bone?

DR. HAMMOND.—Healthy; and there was no evidence of disease of the membrane below, except very trifling congestion.

DR. DUPUY.—Had the fits been noticed to affect one side alone?

DR. HAMMOND.—I am not able to answer, because the patient was not under observation.

DR. DUPUY regarded the case as an important one, and that it was a further illustration of the fact that irritation of the dura-mater with electricity almost invariably gave rise to motion upon the same side. It was properly a case of reflex paralysis.

DR. HAMMOND thought the paralysis too permanent to be of a reflex character.

DR. DUPUY remarked that reflex paralysis might be permanent.

DR. JEWELL.—Does Dr. Hammond think that the cerebral lesion gives rise to the paralysis of the bladder?

DR. HAMMOND.—There has been no evidence of lesion of the spinal cord, and I think that the paralysis of the bladder therefore is of cerebral origin.

DR. JEWELL inquired how such a high lesion could produce such a low paralysis?

DR. HAMMOND thought it might be explained on the ground that there were spinal nerve-fibres continuous with the cerebrum, and the original injury gave rise to trouble which subsequently produced paralysis of the bladder.

DR. MILES referred to the demonstrations of Goltz with reference to continuous nerve fibres from the cord to the brain.

DR. LENTE suggested the possibility of remaining cicatricial irritation.

DR. WEBNER suggested that the loss of virile power might depend upon lesion of the cord disconnected from the brain lesion; the lesion of the cord not manifesting itself in any other way. The doctor referred to a case in which a man something over sixty years of age had had complete loss of virile power since he was twenty-three years of age, when he was thrown from a carriage, and received only an exceedingly slight injury of the back that gave rise to no special inconvenience, and to no spinal symptoms except the one mentioned.

DR. JEWELL remarked that he had been led to locate the genito-spinal centre at the implantation of the fourth lumbar nerve, as had been first pointed out by Budge.

Now, if that were true, by what mechanism could loss of virile power be produced by cerebral lesion? Dr. Jewell was of the opinion that there was some lesion in the lower part of the cord; and the practical question was, Was the lesion primary or secondary to the lesion higher up?

Dr. Hamilton suggested that the lesion in the cord was secondary.

Dr. Jewell regarded it as quite probable.

Dr. Dupuy remarked that Vulpian had demonstrated that no such centre existed as referred to by Dr. Jewell.

Dr. Jewell remarked that experiments had proved to him there was such a centre, for, by irritating that point, slight contractions of the uterus, bladder, and seminal vesicles could be produced.

Dr. Dupuy remarked that he had seen the same contractions produced by irritating the second thoracic ganglia.

Dr. Putnam was unable to understand how descending degeneration could take place without giving rise to other symptoms.

Dr. Beard remarked that loss of virile power and affections of the bladder might be developed without any symptoms whatever of trouble in the spinal cord. No other symptom being present, we were obliged in some cases to assume that the entire trouble was in the brain.

Dr. Putnam, of Boston, exhibited an ingeniously devised apparatus for utilizing the ordinary gas jet in the application of the

ACTUAL CAUTERY.

It consisted of a long piece of rubber tubing, one end of which was attached to the gas burner and the other to a compound blow-pipe, through which a current of air could be forced by means of an elastic bulb. The elastic bulb was attached to the handle of the blow-pipe by means of a second piece of rubber tubing which carried upon it an ordinary toy balloon, or flexible bag, for the purpose of making the current of air constant. The stream of air drove the gas flame against a platinum cup which surmounted the blow-pipe.

Dr. Putnam also exhibited a *galvanometer*.

The next paper was read by Dr. G. M. Beard, of New York, and was entitled

THE INFLUENCE OF MIND IN THE CAUSATION AND CURE OF DISEASE—THE POTENCY OF DEFINITE EXPECTATION.

Dr. Beard maintained that disease might appear and disappear without the influence of any other agency than some kind of emotion. Mental qualities, like drugs, could neutralize therapeutics, and they could also increase the effects of drugs. Fear, terror, anxiety and care, grief, anger, wonder, and expectation were regarded as the most likely to produce disease. When active and unrestrained, those emotions became more effectual in the production of disease and the destruction of health, than the most potent poison. The doctor cited various circumstances, illustrating how disease might be brought on by mental states; and referred to a late paper read before the New York Academy of Medicine by Dr. Gouverneur M. Smith, upon "The Epidemics of the Century," in which it was claimed that the immunity the people had from the ravages of epidemic diseases was due to improved sanitary measures. Dr Beard was of the opinion that the escape from such diseases was due a great deal to the fact that there was less apprehension of them; and that that element should be taken into consideration in making up the estimate with reference to the value of any means employed for the prevention and control of contagious and epidemic diseases.

Reason, hope, joy, resolution, ambition, self-confidence, expectation, were regarded as elements which contributed to the recovery of patients, restoring them from actually existing disease and from death itself, and might neutralize the cause which gave rise to malarial fever and to epidemics. That was a fact long ago recognized, and it had been both used and tremendously abused.

The doctor then gave an outline of a series of experiments which he had performed, for the purpose of testing how much could be done in the way of effecting cures in cases of rheumatism, neuralgia, sleeplessness, and various forms of chronic disease, by exciting in the patients a *definite expectation*; for example, telling them that upon a certain day or hour, or even minute in some cases, they were to be better or be relieved of pain.

When such predictions were made, a therapeutic force was set in motion, which acted constantly, day and night; and if, by resolving to do so, any one of us could wake up at a certain hour, we should be able to get rid of disease in the same manner. There was no imagination, in the ordinary sense of the term, in the instances in which Dr. Beard had experimented, for the patients were actually sick, and the average results he had obtained were superior to the average results obtained under the other method of treatment, but were not equal to the average results obtained when the two methods, the mental and the medicinal, were combined. The effects which had been brought about through the emotions, had been as permanent as those realized through the agency of medicines or electricity in the same class of patients. It was maintained that in disease, in ninety-nine cases out of a hundred, the emotions were supreme. The knowledge, on the part of the patient, that mental therapeutics was being employed in the treatment of their disease, did not discourage them; and the liability to disappointment in carrying out such therapeutics was no greater than that attending the use of any other remedial measure. Mental therapeutics could be applied to acute and chronic, to functional and organic diseases. As an offset to disapproval of such practice, it was urged that physicians were constantly availing themselves of its assistance, either consciously or unconsciously, but that the great majority used it indiscriminately.

It was not the intention of the author of the paper to discard medicinal or other means commonly employed in the treatment of disease, nor to recommend the substitution of what he had called mental therapeutics for other methods of treatment in common use; but simply to direct attention to the influence which the mind had over the body, whether in health or disease, hoping thereby to stimulate the profession to a more thorough study of the subject, for the purpose of availing themselves of its highest advantages.

While many cases could be cured by mental therapeutics alone, for a majority of cases it could be best used as an adjunct to proper medical means; and when so used, the average results ordinarily obtained in the treatment of disease might be improved by a large percentage.

Dr. Lente raised the question whether the benefits attending the use of hypodermic injections of warm water might not be explained by mental influence equally as well as by pressure and irritation, the usual explanation.

Dr. Hammond remarked that, if the doctrine advanced by Dr. Beard was to be accepted, he should feel like throwing his diploma away and joining the theologians. It was probably applicable in certain cases which had fallen under Dr. Beard's observation, but there was not a tithe of evidence regarding its efficacy for the removal of organic disease. The paper was simply a formulation of results with which the profession had been familiar for more than a hun-

dred years. That cures had been effected in the manner alluded to was undoubtedly true; but the element of deceit was present, because when a patient was told that he was to be cured simply by mental influence, no success whatever would be obtained. If that form of practice was to be prevalent, it should be done under some other guise than that of the practice of medicine. "If," said Dr. Hammond, "I give a patient a glass of water, and tell him with confidence —though he does not know that he is taking water— that he is to be relieved, it may be justifiable; but if it is done generally and kept up, it must be done under its true colors, and then it will fail."

Dr. Beard remarked he was aware that the method of treatment had been employed for hundreds of years; but the point he insisted upon was, that the profession did not employ it in a systematic manner. Some had used it with more system than others, and had studied special ways of acting upon the patient by such means. The object of the paper was not to show anything new, but to introduce to the profession some special experiments, with the view of exciting a more thorough study of the subject. The point of special interest was, to show how we might utilize definite expectation in the treatment of disease. Does Dr. Hammond admit or deny that warts are organic disease?

Dr. Hammond.—I am not prepared to say. I am not prepared to say but that warts are functional.

Dr. Beard remarked that all he claimed was, that physicians could more certainly help their patients by availing themselves of that method of treatment in conjunction with other methods.

Dr. Hammond remarked that Dr. Beard was not qualified to follow that form of practice; that he was too well informed and too intelligent. It was doubtless true that Dr. Milton had cured his patients; and that patients had been cured by the water of Lowell; and that cases of King's evil had been cured by the Royal touch; but if that form of practice was to be instituted, we should go back to monkery—give up our instruments, give up our medicines, and enter a convent.

Dr. Miles, of Baltimore, fully recognized the influence of mind over the body, but regarded the handling of it as far more dangerous than handling the most powerful drugs. To assume to possess a virtue when you had it not, was very dangerous.

Dr. Beard, in reply to Dr. Miles' objection, stated that all of us were brought into the same strait, and met the problem in various ways. We were making use of opium, bromide of potassium, electricity, with the expectation of seeing certain effects produced; but we do not know that opium—

Dr. Hammond.—But we believe it will.

Dr. Beard.—We hope it will.

Dr. Hammond.—No; we have sufficient knowledge concerning the power of opium, that we may speak with certainty concerning its effects.

Dr. Beard.—I give a patient a dose of opium, but I do not know whether it will produce sleep. Opium generally produces sleep, but its action is different upon different persons, and there is a chance that it will fail in the present case. A prediction about the effect to be produced by a dose of bromide of potassium may be fulfilled or it may not.

Dr. Jewell remarked that there were many things which made it credible that mind had a power over the body, and instanced the relief from toothache a person experienced when the dentist's room was reached—an effect unquestionably due to mental influence. Now, while this method of influencing our patients might be carried to excess, it was to be assumed that the honest physician would not do that, and he believed it to be the wish of the author of the paper that the profession should candidly study the question, and endeavor to arrive at a golden mean in the application of this method of treatment. Both extremes should be avoided.

Dr. Putnam had never seen any evidence that cure had been effected by mental influence in cases where actual disease had existed, and did not believe that it was proper to state to our patients what we did not know positively.

Dr. Miles regarded it as making definite promises concerning something of which we had no knowledge; and if the patient could look into our minds, he would become cognizant of the fact that we were deceiving him.

Dr. Webber did not believe that Dr. Beard recommended telling falsehoods to our patients; but it seemed to him that he had approached very close to the border line between truth and deception. Good results, doubtless, could be obtained by the proper use of mental influence, but when we overstepped the truth our profession at once was degraded.

Dr. Putnam regarded the experiments as unscientific, because the emotions could not be isolated.

Dr. Mason objected to the term mental therapeutics, and denied its existence.

Dr. Emerson regarded the experiments as unscientific, because the exact nature of the elements experimented with was not known.

Dr. Hammond believed that if the ideas of Dr. Beard were adopted, we should be descending to the level of all sorts of humbuggery; and he hoped that the paper would not go to the public with the endorsement of the Society.

Dr. Beard regarded the remarks of Dr. Hammond somewhat in the light of a caricature; and claimed there was nothing in his paper which implied that we should throw aside our medicines and resort to humbuggery. The object of the paper was simply to call attention to a special means of using the mind in the treatment of disease—namely, producing definite expectation; but it was not to supplant other methods, or turn the profession into a body of quacks. A further object was to stimulate systematic study of an agent which was daily being employed in the treatment of disease.

Dr. Denny, of Boston, upon invitation, exhibited a series of transverse sections through the human brain, intended to illustrate the minute macroscopic anatomy. The brain from which the sections were made had been undergoing the hardening process, by means of alcohol and bichromate of potash, for two years. The sections were made by the aid of a microtome, and under water; were stained, and mounted permanently in dammar. Dr. Denny received a vote of thanks from the Association.

The President called the attention of the Association to two microscopic preparations by Mr. Amidon, showing what appeared to be a joining of two nerve-fibres at right angles in the posterior spinal ganglia. This arrangement, if verified, would serve to show the connection of the ganglion cells of posterior ganglia with the spinal cord and with sensory nerves, and to explain the trophic action of these ganglion cells.

Evening Session—Second Day.

The first paper was read by Dr. N. B. Emerson, of New York, and entitled

CLINICAL STUDY OF TETANY.

The paper consisted of the clinical histories of two cases, together with quotations from various authorities regarding the identity of the affection. Dr. Emerson believed that the disease was entitled to a distinct recognition. Both cases recovered.

Dr. Webber related the history of a case in which recovery took place.

Dr. Miles mentioned a case in which he had mistaken the symptoms, due to a probable thickening of the membranes of the cord produced by syphilis, for those of tetany. The patient made a good recovery under anti-syphilitic treatment.

Dr. Jewell made inquiry concerning the pathology of the affection.

Dr. Emerson expressed the opinion that the disease was simply reflex and functional.

Dr. Mary Putnam-Jacobi, of New York, upon invitation, participated in the discussion, and referred to two cases, which came under her observation in one of the cliniques in Paris, and in which the symptoms bore a striking resemblance to each other, although one patient, a child two years of age, was admitted for spasms of the glottis, and recovered, and the other suffered from what, at autopsy, proved to be cerebro-spinal meningitis. In the first case, the symptoms of tetany disappeared under the use of musk.

Dr. Seguin referred to two cases, one of tetany, and the other hysteria, in which the symptoms bore a very close resemblance. In the hysterical case, the typical cone-shaped hand was present; and in the case of tetany, at first, no spasm had been seen, but in a short time spasm was developed, and the diagnosis made clear.

Dr. Hamilton referred to a case in which spasm of the muscles was present, and it seemed impossible to make a diagnosis until an anæsthetic was administered, when the symptoms disappeared.

Dr. Miles related the history of a case in which extreme spasm of the muscles of the extremities and trunk was developed, in consequence of pressure upon the spinal cord, produced by an abscess upon the shoulder, rupturing into the spinal canal outside of the dura mater. The spinal cord, when removed, seemed healthy. There were no bed-sores.

Dr. Putnam inquired whether tetany became persistent, as hysterical contractions sometimes did?

Dr. Emerson replied that he had not observed any such cases.

Dr. Swezey, upon invitation, spoke concerning the occurrence of tetanus upon Long Island, and knew it to be a fact that punctured wounds were exceedingly liable in that locality, especially upon the eastern portion of the Island to be followed by tetanus.

Dr. Seguin was of the opinion that

SPONTANEOUS TETANUS

occurred upon Long Island, and

Dr. T. A. McBride, of New York, alluded to cases of spontaneous tetanus occurring in that locality, and mentioned by Prof. T. G. Thomas, of the College of Physicians and Surgeons.

Dr. Miles referred to the spontaneous occurrence of tetanus among the blacks in South Carolina; and

Dr. Dupuy spoke of the very frequent occurrence of the affection in Mauritius.

Dr. Putnam-Jacobi referred to two cases mentioned by Bernard.

Dr. Putnam, of Boston, reported the results of his observation in the use of

CARBONIC ACID GAS IN THE TREATMENT OF HEADACHE.

The result was negative in eight out of nine cases.

Dr. Dupuy referred to the experiments by Brown-Séquard and himself, which led to the recommendation of the gas for the cure of headache. The cure, it was supposed, was effected by reflex action, the carbonic acid gas irritating the pharyngeal and laryngeal mucous membrane. In his experience, cure had been effected for the time being, except in a few instances. In the cases in which failure followed its use, the hysterical element was present.

FRIDAY, JUNE 9—THIRD DAY.

Afternoon Session.

The Association was called to order by the President, Dr. Jewell, and immediately went into executive session.

Dr. Eugene Dupuy was elected a member of the Association.

Dr. Putnam exhibited microscopic specimens of syphilitic artery and sclerosis of the posterior columns of the spinal cord, which were prepared by Dr. Edes, of Boston.

Dr. Hammond presented a case of cross-paralysis, which, with three others, he proposed to make the basis of a paper to be submitted to the Council.

The Association granted permission, and also granted permission to submit a paper upon

CEREBRO-CARDIAC DERANGEMENT,

probably identical with chlorosis.

The first paper was read by

Dr. A. McLane Hamilton, of New York, and entitled

OBSERVATIONS UPON CHRONIC EPILEPSY.

In the analysis which the doctor gave of twenty-seven cases that had fallen under his observation, it was found that some had depended upon uterine disease, others upon masturbation, still others upon the presence of intestinal parasites, and in a certain number of instances syphilitic poison seemed to be the cause of the disease.

The paper gave rise to discussion, chiefly with reference to treatment. The first indication was to remove the cause, if it could be ascertained. To allay erethism and reduce the susceptibility of the medulla, and to administer some general nerve sedative, were the leading secondary indications. In those cases in which there was a tendency to anæmia, the bromides did harm.

The doctor claimed that not more than one drachm of either of the bromides should be administered during twenty-four hours.

In those cases in which there was present a tendency to hyperæmia, ergot in large doses was recommended.

Attacks of *petit mal* could be cut short by hypodermic injections of atropine.

Dr. Hamilton regarded digitalis as one of the most important adjuvants we possessed in the treatment of epilepsy.

Nitrite of amyl was regarded as an agent which could afford temporary relief only, and was chiefly serviceable in those cases in which a succession of fits occurred. The doctor regarded nitro-glycerine as an excellent prophylactic. He had used it in solution containing about one-quarter of a drop to v. ♏ of alcohol, and had found that it produced almost an exact effect with nitrite of amyl, but the effects had been more permanent. The principal point in the treatment which gave rise to discussion, was that relating to the use of small doses of the bromides.

Dr. Hammond did not believe that small doses were of any avail whatever, but that large doses should be

administered and repeated, so as to develop the bromic cachexia as quickly as possible. One hundred and sixty grains a day had been given before any effect upon the paroxysms was produced. Administer the bromides, gradually increasing the size of the dose, until the super-excitability of the pharynx was diminished; and unless that was done it was evident that a sufficient quantity of the drug had not been given. In certain cases in which the paroxysms were kept up by force of habit, nitrite of amyl might effect a cure, but, as a rule, its effect was only temporary.

Dr. Miles regarded it as necessary that bromism should be produced, and it might be necessary to administer more than grs. xl. three or four times a day.

Dr. Hamilton thought bromism injurious, because it depressed the system. He regarded grs. xx. t. i. d. as sufficient, if combined with ergot, which contracted the arterioles.

Dr. Putnam inquired whether the bromides produced their good effect in epilepsy, by contracting the arterioles, or by producing some direct effect upon the nervous centres? Furthermore, was it known that the amount of blood in the medulla was diminished under their influence?

Dr. Cross, of New York, believed that complete bromism should be produced, and that the patient should be kept in that condition for some time.

Dr. Seguin remarked that he never gave less than a drachm of the bromide within twenty-four hours, and frequently as much as grs. 120, or even 160. His rule was to administer at bed-time the maximum dose for the day, because the excitability of the spinal axis was greatest at night. A degree of bromism should be produced in the patient, and the symptoms of true bromism could not be developed by administering only sixty grains a day.

Dr. Seguin habitually administered other remedies in combination with the bromides. He used ergot considerably, and in doses of one drachm of the fluid extract three or four times a day. Strychnia was regarded as almost a specific against the motor symptoms of the bromides. Arsenic diminished the acne of bromism, and in many cases prevented its occurrence. Tonics of various kinds, especially chalybeates, should be given regularly, in order that the bromides might be better borne.

Dr. Hamilton remarked that there were cases in which large doses of the bromides could be used with benefit for a week or so, but that he recommended the regular administration of only grs. xx., t. i. d., and the occasional use of large doses—even to sixty grains.

Dr. F. P. Kinnicutt remarked that his experience was entirely in accord with Dr. Seguin's, especially with reference to the size of the doses of bromides and their combination with other remedies.

Dr. Jewell remarked that it had seemed to him the fits occurred just in proportion as the patient became fatigued. That was not invariably the case, but quite regularly so. He had therefore given small doses of the bromides during the forepart of the day, a large dose after dinner, and the next large one at bed-time. He regarded the production of a certain amount of anæsthesia of the pharyngeal and laryngeal mucous membrane as important.

Dr. Cross raised the question, why administer a large dose of the bromides at bed-time if bromism was all that was necessary?

Dr. Seguin remarked that the effect expected from a large dose of the drug at bed-time was temporary and immediate, and at the same time it contributed to the more permanent influence arising from a certain degree of bromism. If the fit occurred in the day-time, the time of administering the large dose might be changed.

Dr. Miles regarded it as important to find out when the attack, as a rule, occurred, and apply the remedy accordingly.

The paper was further discussed by Drs. Hamilton, Hammond, Dupuy, and Seguin; and in the course of the discussion attention was called to the *nitrite of amyl bulbs* devised by Dr. T. A. McBride.

The next subject brought before the Association was

REGIONAL CEREBRAL DIAGNOSIS.

By Dr. F. T. Miles, of Baltimore.

The case which Dr. Miles narrated was interesting, from the fact that the injury of the brain in a particular locality was connected with the exact symptoms observed before the death of the patient.

The brain injury in this instance occurred in an eminent lawyer who, at the time symptoms were first developed, was cross-examining a witness. A facsimile of his handwriting was exhibited, and it could be seen exactly where irregularities in outline of letters began to show themselves.

From that point the chirography grew more and more illegible, until finally a mere blot was made. The gentleman then rising to address the court, it was perceived that something was wrong with him, and he was removed from the room. He became semi-comatose, had complete right hemiplegia, the right side of the face was completely paralyzed, and *ptosis* of the left eye was strongly marked. The tongue was not paralyzed, but the patient was unable to thrust it out, and there was no paralysis of the muscles of deglutition. There was some anæsthesia upon the affected side. The patient answered all questions affirmatively. The eyes could be made to follow the finger only as far as the median line to the right, when they would stop, and the patient would carry them over to the left side. The case terminated in the usual deep coma and death. Dr. Miles had diagnosticated *crural hemorrhage*, producing ptosis, with paralysis upon the opposite side. At *autopsy* a mass of blood which had so flattened the convolutions, that it could be easily seen beneath the surface, was found in the central portion of the middle lobe of the brain upon the left side. When the sac was opened, the first blood that escaped was fluid; then came a jelly-like mass; and, lastly, a hard clot, not easily broken up, which was probably the original clot that gave rise to the first symptoms. The clot did not break through into the ventricles, but remained enclosed in the substance of the third lobe.

Dr. Miles referred incidentally to a case in which an abscess occupied the same region occupied by the original clot in the case being described, but in which there was not a shadow of motor paralysis. In the present instance, the autopsy proved that the diagnosis was incorrect, because there was no hemorrhage into the crus. The symptoms, therefore, were explained by the double influence produced by the destruction of brain substance, and pressure upon the surrounding parts; and that it was the pressure upon the crus and the third nerve that gave rise to the eye symptoms. Dr. Miles demonstrated his remarks by means of finely executed models of the human brain.

Dr. Jewell remarked that the fact of the symptoms in Dr. Miles' case being due to pressure produced upon parts outside of the real lesion, showed how easily mistakes could be made with reference to diagnosis and prognosis.

Dr. Hammond inquired with reference to dilatation of the pupil and strabismus.

Dr. Miles replied that there was no special dilatation of the pupils, and that he did not observe any strabismus.

Dr. Hammond, from those facts, was inclined to regard the ptosis as entirely independent of intra-cranial trouble. He did not regard the case as one of cross-paralysis, but that the ptosis depended upon some orbital lesion.

Dr. Seguin directed attention to one symptom in Dr. Miles' case which would cast a doubt upon the diagnosis of affection of the crus—namely, the eye symptom. The fact that the patient could not be induced to turn the eye beyond the median line to the right, and tended to look to the left, was in obedience to what occurs in lesions of the hemispheres and not in lesions of the crus. From that fact alone he would have been led to believe that the lesion was not limited to the crus.

LOCALIZATION OF MOTOR CENTRES.

Dr. Eugene Dupuy, of New York, read a paper upon the above subject, which may be summarized in the following propositions:

The cortical substance of the brain was not excitable by any means, either physical, chemical, or mechanical.

The effect of electricity, when applied to the surface of the brain, was not localized, but diffused, and the motor results obtained when electricity was used were not due to the direct action of the irritant, but were altogether reflex.

No part of the brain substance was excitable except the nerve-fibres, and there was no way by which nerve cells could be excited except by exciting the nerve-fibres with which they were connected.

When electricity was applied to the cortex, motion might take place, but it was not the nerve-cells themselves which were put into action, as proved by experiments. The cranium of an animal was laid open, a point made sure, which, when irritated, gave rise to certain motions, and then the pia-mater was rendered opaque by means of hot iron, but motion followed the application of an irritant, the same as before. The wound was then allowed to close, and at the end of a month the electrodes were applied over the dura mater covering the same spot, and motion was produced upon the same side of the body. The dura-mater was then divided, and the white patch in the pia-mater exposed, and then, when the electrodes were applied, slight motion followed, but not so marked as before. The surface of the part was then dried by means of blotting paper, and the electrodes applied, but no motion followed. The sclerosed patch of pia mater was then removed, and the surface dried, but no motion followed the application of the electrodes.

If motion did not take place in the second series of experiments, it was not from lack of cortical substance, because the fibres below were found to be healthy when examined with the microscope.

It was then clear that the motion was not due to disturbance of the nerve cells, nor to disturbance of the nerve fibres, except those in close relation with the blood-vessels. The doctor then undertook the examination of the structure of the brain tissue and pia-mater; and he had found that the only points in the cortical substance where motion could be produced by the application of an irritant, were those supplied by vessels which came from the pia-mater, and dipped deep into the substance of the brain, and had nerve fibres accompanying them. He believed, therefore, that there was a nervous connection between the pia-mater and the fibres from the spinal cord which was continuous, and that motion was produced through that connection when an irritant was applied to the pia-mater.

The paper being open for discussion,

Dr. J. W. S. Arnold, of New York, asked Dr. Dupuy what current he employed to stimulate the brain; the induced or the constant current, or the primary or secondary induced current?

Dr. Dupuy replied that it made no difference with regard to the current employed.

Dr. Arnold remarked that that was an important point to be decided; and that he was convinced the diffusion of the induced current was so great that its action could not be limited, whereas the constant current could be limited, and the exact point from which the action came could be determined.

He had also been able, by means of the constant current, to decompose brain tissue to such an extent that motion in certain muscles or groups of muscles, in response to the electrical irritant, could not be reproduced; and that when such tissue had been examined microscopically, the structure had been found to be entirely changed. He had also found that when certain points in the brain, which seemed to have presiding power over definite sets of muscles, were destroyed by means of the constant current, motion could no longer be produced in response to the electrical irritant.

Those were the arguments he brought against Dr. Dupuy's theory, and in favor of localization of motor centres. Dr. Arnold inquired of Dr. Dupuy whether the motion was due to the irritant effect produced upon the involuntary muscular fibres in the coats of the arteries?

Dr. Dupuy replied that they were.

Dr. Arnold remarked that the action of involuntary muscular fibres was slow, but that the motions produced in response to an electrical irritant applied to the surface of the brain, were instantaneous.

Dr. Dupuy remarked that he had not seen movements follow immediately upon the application of the irritant.

Dr. Arnold remarked that he had records of movements following immediately upon the application of the irritant; and not only so, but that he had measured the difference in time which elapsed before motion was produced when the irritant was applied to the involuntary muscular fibres of the blood-vessels in the brain, and when it was applied to the cortical substance and gave rise to motion in the voluntary muscles in the limbs of the animal, and that there was a very appreciable difference in the length of time which elapsed before motion was produced in the two instances. In all his experiments, also, the brain surface was kept free from moisture.

Dr. J. J. Mason remarked that in carefully performed experiments on clay he had not noticed any difference in the diffusion of the two currents.

Dr. Arnold did not believe that experiments performed in that manner settled the question of diffusibility of the electrical current in the brain.

Dr. Jewell thought that, although Dr. Dupuy's paper was interesting with respect to the question of the mechanism by which the excitation led to the contraction, it did not militate greatly against the doctrine of localization of function, but was simply another method of explaining how the contraction was brought about. If the contraction was due to a modification in the nutrition of the part irritated, that view was just as favorable as any other to the doctrine of localization. The theory advanced by Dr. Du-

puy, for aught he knew, might be correct; but it did not, in his opinion, affect the doctrine of localization of function at all, but was simply another way of explaining the phenomenon of voluntary muscular contraction. He was strongly inclined to believe in the doctrine of localization of function.

At the close of the discussion, Dr. Hammond nominated Dr. J. C. Peters for membership, subject to the action of the Association at its next annual meeting.

Evening Session—Third Day.

The Association was called to order by the President; and, under the head of Miscellaneous Business, it was resolved to hold the next annual session in the city of New York, commencing on the first Wednesday of June, 1877.

The following papers were then read by title, and referred to the Council:

The Development of the Nervous Tissue in the Human Embryo, by Dr. H. D. Schmidt, of New Orleans.

Contribution to the pathology of the Fronto-Parietal Region of the Cerebrum, with Case, by Dr. T. A. McBride, of New York.

Post-Diphtheritic Paralysis, by Dr. J. J. Putnam, of Boston.

On Brain Tumor without choked Disc, by Dr. E. C. Seguin, of New York.

On Tumor of the Pons, by Dr. J. C. Shaw, of Brooklyn.

Dr. T. B. M. Cross, of New York, then read a paper

on the retinal circulation in epilepsy.

The paper contained the opinions of various observers upon the condition of the intra-ocular circulation during epilepsy, and also the results of the doctor's own observations, made in 95 cases. His conclusions were mainly as follows:—In a large proportion of cases there was no change in the intra-ocular circulation in the interval between the paroxysms, and no alteration of any of the structures of the eye. In some cases there was an increased or diminished amount of blood in the retinal vessels, but such change was purely accidental, and not because of the epileptic paroxysm. There might be congestion of the retinal vessels after a fit, but it soon disappeared, whether the fit was nocturnal or diurnal. When anæmia was present, satisfactory results did not follow the use of remedies which were said to increase the amount of blood in the brain.

The paper was discussed by Drs. Putnam, Dupuy, Hamilton, Hammond, and Putnam-Jacobi.

Dr. Putnam raised the question whether the bromide of potassium acted through the blood-vessels or nervous centres, and whether, if contraction of the blood-vessels could be produced in any other way, the same effect would be produced as by administering the bromides?

Dr. Hammond gave a number of reasons for believing that the bromides diminished the quantity of blood in the brain.

Dr. Putnam-Jacobi remarked that, with regard to the question whether the effect produced by the bromides was directly upon the molecular elements of the nerve cells, or first upon the blood-vessels, some light, perhaps, might be shed by the fact of the occurrence of acne while the bromide was being administered. Eruptions similar to acne, as well as acne itself, were developed under conditions closely resembling those present when the bromic cachexia was developed; *i.e.*, after recovery from long-sustained nervous excitement followed by nervous exhaustion. Several cases were cited in which cutaneous eruptions were manifestly of nervous origin, and also cases in which cutaneous eruptions had followed allaying of the excitability of the nervous elements. Might not the occurrence of acne after administration of the bromides, which allay the erethism of the nervous system, be evidence that the effect produced was directly upon nerve elements; and, in addition, that they produced effects upon the blood-vessels?

Dr. Hamilton remarked that he had seen bromic acne fully developed, and the fits continued as violently as at the beginning.

Dr. Putnam, of Boston, exhibited a

section of the spinal column and of the spinal cord removed from the body of a boy who had suffered from fracture and dislocation at the twelfth dorsal vertebra.

The last paper was read by Dr. Allan McLane Hamilton, of New York, and consisted of clinical notes upon two cases of

locomotor ataxia associated with the general paralysis of the insane.

The close of the session having been reached, Dr. Hammond moved a vote of thanks to the President for the uniform courtesy he had manifested while presiding over the deliberations of the Association, which was unanimously carried.

Dr. Putnam moved a vote of thanks to Dr. W. M. Carpenter, of the New York Medical Record, for his assistance in making the notes upon papers and the discussions, which was also unanimously carried. The President, Dr. Jewell, congratulated the Association upon the success which had characterized the present session, and spoke for a steadily increasing zeal and activity in its studies and investigations.

The Association then adjourned, to meet in the city of New York on the first Wednesday of June, 1877.

Reviews and Notices of Books.

The Pathology and Treatment of Child-bed, a Treatise for Physicians and Students. By Dr. F. Winckel, late Director of Gynæcological Clinic, Univ. of Rostock, from second German edition, with additional notes by authors. Translated by James R. Chadwick, M.D., Clinical Lecturer Diseases of Women, Harvard Univ. Philadelphia: H. C. Lea. 1876.

This treatise, which has been the standard one of its kind in Germany, bids fair to take a distinguished place as an authority in this country. Presenting to us the doctrines of the German school, it will form a companion to the American views upon the subjects, alongside of which a comparison can be made.—The range of the treatise is quite extensive, in fact almost exhaustive, giving evidence of much painstaking research by the author, in his desire to work up an extensive foreign bibliographical survey.

The introductory chapter is full of careful description and suggestion, and prejudices the reader in favor of the work as a useful and trustworthy manual. The puerperal affections of the external genital organs, which are treated of in section first, are well presented; but the practical value of the descriptions centres in those which refer to hemorrhages, the varieties of inflammations, and the resulting thrombosis and pyæmia.

Chapter VI. of this section, on the etiology of the so-called puerperal fever, is well worthy of careful study, and is full of valuable and suggestive facts for the consideration of every one liable to treat the malady.

The puerperal diseases of the breasts receive a careful and discriminate treatment in section two; while those of other organs, in section three, receive their due share of attention.

On the whole, the work will be found to be of the greatest value to the practitioner, as presenting the views of a very careful and discriminative observer, and one whose judgment has been tempered by a long and varied experience in the treatment of the different puerperal diseases.

The profession are under great obligations to Dr. Chadwick for the admirable manner in which he has made the translation. Unlike most efforts of its kind, it is a model of classical interpretation of the language of the author.

Correspondence.

PATENT RIGHTS AND PROFESSIONAL CHARACTER.

ELMIRA, N. Y.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—An editorial, in the RECORD of June 24th, opens the way for further inquiry as to the soundness or unsoundness of the Code in making it derogatory to professional character for a physician to hold a patent for a surgical instrument. It seems to me that the misunderstanding which has so long existed among good men in our profession on this point had its origin in a superficial or erroneous comprehension of the *several* moral principles which underlie the subjects of surgical invention and of letters patent. One thoughtful, candid glance at the ethical clause in question will, it seems to me, make the truth of this remark apparent. The clause reads as follows:

"It is derogatory to professional character for a physician to hold a patent for any surgical instrument or medicine; or to dispense a secret *nostrum*, whether it be the composition or exclusive property of himself or of others. For, if such nostrum be of real efficacy, any concealment regarding it is inconsistent with beneficence and professional liberality; and if mystery alone give it value and importance, such craft implies either disgraceful ignorance or fraudulent avarice."

Now the most conspicuous error in this clause consists in classifying two kinds of persons in one and the same verbal expression, and immediately afterward in pronouncing upon both classes the condemnation which is only due to one of them. If the weight of this edict rested simply upon the dispensers of *secret nostrums*, its verdict would be just; but when it includes the inventors and patentees of surgical instruments, it overreaches the bounds of justice. The patentee of a surgical instrument keeps nothing *secret*. He exercises no *craft*, but is eminently open and frank. He shows no *disgraceful ignorance*, but evinces advanced knowledge. He is not actuated by *fraudulent avarice*, but simply desires a fair compensation for his own mental labor and the expenses attending his study. He is not deficient in *liberality* toward his professional brethren. (Might I not almost say that they are deficient in liberality toward him?)

Looking at the subject in this critical light, do we not clearly discover that the Code is correct in condemning *illiberality*, *secrecy*, *craft*, *disgraceful ignorance*, and *fraudulent avarice*, but that it is incorrect in attributing any of these qualities to the surgeon and scientist who simply avails himself of a governmental provision for reaping the pecuniary rewards of his own labor?

If the foregoing be true, then we shall sacrifice none of the exalted principles which have ever characterized the medical profession by making the amendment in the Code which this construction would seem to call for.

And may there not be other arguments besides justice to the inventor that should induce us to make this alteration in the Code?

Those wise men who were the framers of the Constitution of the United States, in order "*to promote the progress of science and useful arts*," gave Congress the power to secure, for limited times, to *authors and inventors* the exclusive right to their respective *writings* and *discoveries*.

Is it true that this provision of Congress, if allowed full sway among surgeons, would be instrumental in *promoting the progress of science* in the field of surgical implements and appliances? If so, then this is another valid argument for removing the inadvertent restriction.

Should this restriction be removed, then the inventor, instead of being classed with the dispenser of secret nostrums, would be classed with the author—better company; and when the author goes to the publisher and asks, "How much will you give me for this manuscript?" the inventor may go to the cutler and ask, "How much will you give me for this instrument?" and the profession at large will stand in the same relation to each; for in buying a book they will pay the author for writing and the printer for publishing, and in buying an instrument they will pay the originator for inventing and the cutler for making.

In neither case is it to be supposed that money is the main object of the physician's study and labor—no, his motive is far nobler; the benefit of humanity; but money is always a proper and legitimate auxiliary to help the philosopher and the philanthropist onward in every praiseworthy undertaking.

Yours respectfully,

T. H. SQUIRE.

CINCINNATI, June 26th, 1876.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—In your issue of the 24th of June you direct attention to this matter as called up by the resolution offered before the American Medical Association to the effect that "it is not derogatory in any physician to take out a patent for a surgical instrument of any kind." In your article you seem willing to do away with a portion of the disabling clause of the Code, to the extent that a physician may patent an apparatus used in medicine, provided it "can also be used in other arts." Now, why draw a line which, if ever drawn at all, would be an exceedingly crooked one—running far out into forbidden fields? Why may we not boldly declare that the present section of the Code is narrow and contracted—of the nature of Trades Unions restrictions rather than those of a liberal profession, prompted more by selfishness toward ourselves than generosity toward mankind—the tyranny of the many over the few under the guise of medical etiquette? Is not this a peculiar profession,

by the joining of which we are divested of one of our rights as American citizens?

Let us look into the *fons et origo* of the patent law. It is this: the community are aware that certain men possess that peculiar combination of faculties which renders them apt at contrivance; they have discovered that to induce such persons to put forth their best efforts they should be rewarded, not only by the esteem of their fellow-men, but *pecuniarily*, for the time, toil, and thought expended, all this aside from the absolute property right which each one has to the result of his labor. Also, they have seen that nothing operates so forcibly in causing an inventor or manufacturer to introduce a new article as the security of future sales; but for this many a valuable invention would now moulder in a dusty attic, or never have been made. Thus thinking, they have formulated the admirable patent laws, protecting the inventor in the product of his time and talent for a limited term of years, after which it becomes the property of mankind. What is the result of this beneficent system? It need not be told; the world knows it. Why, then, should medical art be debarred from the operation of these just and good laws? Why should medical men not be encouraged to put forth their best energies for the advancement of the mechanical part of their profession? "Oh!" it is said, "the primary object of all inventions directly or indirectly connected with the healing art is for the benefit of humanity, and . . . the medical man should be remunerated by the consciousness of contributing his mite to the relief of mankind."* Well, then, let us throw away our fee-tables and throw away our fees. Let us be in fact what we are in theory—an eleemosynary order, pursuing long years of study, expending thousands of dollars, all, that we may be prepared to benefit mankind. Let us cast ourselves with open arms on the generous breasts of that public, with whom gratitude to the physician is the first thought, but tangible evidences the last. No! this is not practical, it will not do for the medical practitioner, neither will it do for the medical inventor.

The entire subject of patents should be stricken out of the Code, and relegated where it belongs—to the laws of the United States. We need have no fear of an inundation of medical patents, for they, as a rule, are worthless, not enough of any one instrument being sold to pay the cost of procuring a patent; neither need we fear oppressive exactions in the way of royalty, for this would only be an equitable division between inventor and manufacturer of the profit which now goes entirely into the pockets of surgical instrument-makers—men who are ready enough to patent any device of their own, and equally ready to derive profit from the ingenuity of their credulous medical friends. If perchance there should be a medical patent so valuable and so indispensable that it should be given to the world free, then let the government purchase it from the inventor at an equitable price and make the donation; but do not demand that the inventor make all the sacrifice. W——.

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613 Seventh Street, Washington, D. C., June 28, 1876.

To the Editor of The Medical Record.

Sir:—In your journal for 24th June I notice some remarks on "Patent Rights in Medicine," indicating a tendency to relax the Code which prohibits a physician to take a patent for any invention he may make. And in regard to this question I wish to say a few words—an offering of my mite—toward a correct understanding of this matter. A patent can only be granted for some instrument or thing which is beneficial to the public. The art of a physician is directly to this same point, and we will suppose his invention is an instrument to be used in surgery. Now his chief desire *should be* that every practitioner should possess this instrument, because in that way only can the public receive the full benefit of it. The Code requires that this end should be accomplished by a voluntary dedication of the invention to the public; but does that proceeding bring about the desired result? All experience proves that it accomplishes next to nothing, except in exceptional cases. In order that this instrument may go into the hands of every practitioner, two things are necessary: 1, They shall be manufactured; 2, They shall be brought to the notice of and explained to every practitioner. Yes, and a third thing comes in—they must be manufactured at a price which will not exceed the ability of the practitioners to pay. The dedication does not accomplish or even touch either one of these conditions, without which the invention might as well not have been made. The first requires an investment of capital in advance, and upon a hope and prospect of return. The outlay is necessarily considerable. The second likewise requires an advance in capital for advertisements, etc.; and the third is of equal importance. No one will advance this capital, and sink it in absolutely necessary *preliminary operations*, to perfect and make this thing known, if at the moment he has succeeded in making a market all his rivals in business are at liberty to step in and share the profits without any of the preliminary outlay. *Therefore* this instrument does not go into such general use as enables the public to derive such benefit as the philanthropic inventor desired. The result is, it is only manufactured in the most disadvantageous way, *i.e.*, by hand, and without aid from special tools. It only goes into possession of public institutions and wealthy practitioners, to whom expense is of minor importance. It is only manufactured perhaps upon special order or in small quantities, and the expense is enormously exaggerated. But suppose he takes a patent. The manufacture may then be confined to a single party. The monopoly enables that party to advance the required capital with safety, special tools are constructed, and the instrument is produced at a low rate and of superior quality. And the history of inventions shows that exorbitant profits are not imposed, the desire to sell large numbers being best subserved by moderate profits.

Those best acquainted with this subject all agree that the public benefit is promoted by patents; and if this is true in regard to general devices, there is no reason for excepting those devices which are related to medicine.

If the inventive physician hesitates to *profit* by his mechanical invention, because of humanity, it seems the same reason should operate to prevent his daily entry for attendance at the bedside of his suffering patient. But then he can easily forego his royalties if he so desires, and no one will complain, and he can stipulate with the manufacturer whom he licenses that profits shall not be above a certain percentage. However he may do in those regards, the true Code should require him to do all that he can to extend the usefulness of the invention, and that can only be accomplished by means of letters patent.

Respectfully,

R. D. O. Smith.

* This is a quotation from the Record, but it is the foundation-stone on which all those build who support the present attitude of the Code.

THE MICHIGAN STATE MEDICAL SOCIETY AND THE UNIVERSITY OF MICHIGAN.

UNIVERSITY OF MICHIGAN,
ANN ARBOR, June 21, 1876.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—Will you allow me to call your attention to the very unfair impression conveyed by your report of Michigan affairs at the late meeting of the American Medical Association? According to your report it appears that the delegates from the Michigan State Medical Society were ultimately exculpated by the Judicial Council, whereas the truth is that they are even now under charges before that body,—charges, too, of the most serious character, in reference to which the Judicial Council have promised to report at the next annual meeting of the Association.

True, one set of charges was not sustained, but before the Council on the first and milder set a second and much more serious charge was preferred, and when the roll was called the delegates from the Michigan State Society were protested against, and the matter was referred to the Judicial Council.

For the information of those of your readers who were not at the meeting, I may mention that the delegates from the State Society of Michigan are charged with the most improper affiliation with and "aiding and abetting" of homœopathy and other quackery, and the evidence of their guilt is to be found in the published Transactions of the Society for the years 1874 and 1875. The charge was preferred by a member of the medical faculty of the University of Michigan.

Again, you report quite accurately the resolution of Dr. Toner in reference to the aiding and abetting in the graduation of students in irregular or exclusive systems of medicine,—a resolution the principle of which no respectable member of the profession could for a moment hesitate to endorse; but you have inadvertently omitted all notice of the important and pointed resolution moved by my colleague, Professor Frothingham, and without which Dr. Toner's would have had but little practical significance or utility. It reads as follows:—"*Resolved*, that the Judicial Council be asked to investigate and determine precisely the kind of action which shall be regarded as aiding and abetting, and report at its earliest convenience." This resolution was carried without a dissenting voice. The important bearing of these two resolutions upon the controversy which has existed in this State during the last twelve months will at once appear.

Interested and unscrupulous persons have endeavored to persuade the profession of the land that we of this University Faculty have been and are in the position of *aiders* and *abettors* in the graduation of homœopathic students.

We stoutly and most unequivocally deny this charge, and, on the contrary, contend that we have been and are now standing in the breach, and preventing the country from being flooded with homœopathic graduates. We contend that we have been and are engaged in defending this reputable and important stronghold of regular medicine from passing over into the hands of the homœopathic fraternity. Not only so, but we are prepared to prove that for the seeming temporary advantage which homœopathy *has* gained at this point the State Medical Society, which has for three years urged a policy of affiliation with all sorts of quackery, is to blame.

Now, sir, the resolution of Dr. Frothingham will necessitate the calm, full, and impartial investigation of these matters in all their details, and the result will be a decision from which there is no appeal. With this position of affairs we of this Faculty feel thoroughly satisfied. We feel that at last we will get a *fair hearing*; that our case will be *thoroughly sifted*; that blind prejudice and wilful misrepresentation will alike be silenced, and that there is at last a prospect of our receiving from the profession all that we have asked, namely, *justice*. I am, etc.,

DONALD MACLEAN.

PRELIMINARY EDUCATION.

PORTLAND, MAINE, 24th June, 1876.

TO THE EDITOR OF THE MEDICAL RECORD.

DEAR SIR:—Some weeks ago you approvingly mentioned the rule of the Portland School for Medical Instruction, which requires every applicant for admission to undergo an examination in common English branches, unless he can furnish documentary proof of his graduation from at least a respectable academy. Last week the school year began; and, while one-quarter of the students were college graduates, and another quarter had fitted for college, a number of new applicants presented themselves who were obliged to submit to the examination. This was of a very elementary character, consisting of questions in arithmetic (interest, reduction, proportion, fractions), geography, and grammar, the candidates' knowledge of the last study being tested by their ability to correct a badly spelled, constructed, and punctuated passage. Simple as the exercise was, a third of those who attempted it were at once rejected.

Let me give you a few samples of the answers. One man named "the States bordering on the Atlantic in regular order from north to south," as follows: "Mane, New Hampshere, Massachusets, Rhodeisland, Connetieut, New York, Delaware, Verginea." Of the sixteen counties in Maine (his own State), he gave "Cumberland, Nox, Lincon, Aroostoc, Sagadahoc, Somerset." He could not name a single city of continental Europe—in fact, he did not know what "continental" meant—and he had no idea of the location of the Niagara River. He failed on arithmetical problems which most boys of twelve would solve in ten minutes, and the following are fair samples of his spelling:—"Medicle, som, comon, arithmatic, speling, necassary, daley, desgrace."

This was thought to be the worst possible display, until the inspection of a set of papers which showed that the writer of them not only knew almost nothing of arithmetic and geography, but did not comprehend the meaning of ordinary English words. Here are some examples of his cacography:—"Acknoledg, verey, desireable, possesed, pelimenary, edducation, enny, knowledg, clasicts, bleive, Lattin, admitt, arethmetic, nessesary, phycian, capeable, writeing, accerately, daly, desgrace, medisene."

I am aware that it is often objected that an examination of this kind does not gauge a man's capacity for medical work; that some excellent practitioners are abominable spellers, and that many a bright and learned man would shrink from an examination in geography and simple mathematics. I admit that some good physicians are heterographic prodigies. Only the other day a worthy surgeon of my acquaintance, in recording an injury between the hip and knee, wrote that the patient had his "thy jambed." But while such phonetic atrocities may be pardoned on the score of natural inaptitude at one of the most arbitrary and perplexing branches of study, it is fair to insist that, if a man can not re-learn the most of the forgotten geography and arithmetic of his boyhood in a few days, his mental endowments are not

sufficient to warrant any one in encouraging him to enter upon the study of medicine. The deplorable exhibition of ignorance at the examination which I have mentioned compels the belief that there are in most of the medical schools large numbers of students who are utterly unprepared to appreciate what is said to them; for any man can enter almost any school in the country on payment of the required fees, without a question as to his attainments or ability. As a result of this the professors must either talk unintelligibly to a considerable proportion of their auditors, or else, by adapting their instruction to the understanding of the average student, do less than justice alike to their topics and the better class of their pupils.

An entrance examination which requires so inconsiderable an amount of knowledge and training as this in Portland, is certainly nothing to boast of, and I write to you about it not because we consider its existence particularly creditable or worthy of note, but because, as you have shown so much interest in everything pertaining to medical education, I thought you would like to know definitely some of the results of a genuine effort to investigate the qualifications of the men who undertake the study of medicine. You will be pleased to learn that there is a determination on the part of the instructors in the school to rapidly advance the standard of preliminary requirements, and, on and after 1878, to insist upon the elements of Latin and natural philosophy. Yours very truly,

FREDERIC HENRY GERRISH.

Medical Items and News.

DRS. J. R. VAN KLEEK AND J. O. STONE.—At a stated quarterly meeting of the Board of Managers of the New York Society for the Relief of Widows and Orphans of Medical Men, held at the rooms of the New York Academy of Medicine, June 21, 1876, the following resolutions were passed in regard to the decease of Dr. John R. Van Kleek and Dr. John O. Stone.

JAMES L. BANKS, *President.*

GOUVERNEUR M. SMITH, *Secretary.*

Whereas, It has pleased an Allwise Providence to remove suddenly from us our late presiding officer, John R. Van Kleek, M.D., whose labors as a member of the Board of Managers and as President of this Society for two years have contributed largely to the present prosperity of this institution; therefore,

Resolved, That we reverently bow to the wise behest of Him who has promised to be the widow's friend and a father to the fatherless, and whose blessing is vouchsafed upon all efforts of benevolence;

Resolved, That in the death of Dr. J. R. Van Kleek the medical profession has lost one of its most worthy members—one who was ever watchful of its best interests and whose earnest and thoughtful labors have done much to preserve its institutions and harmonize its interests;

Resolved, That we tender our heartfelt sympathy to the members of his family, with the assurance that he has endeared himself to the whole profession and bequeathed an honorable example worthy of the imitation of all its members;

Resolved, That a copy of these resolutions, properly authenticated, be communicated to the family of our late President, and that the same be published in the medical journals of this city. (Signed)

Committee { SAMUEL L. PURPLE, M.D., O. WHITE, M.D.

On coming together so soon after the death of our long-time associate and friend, Dr. John O. Stone, and seeing the chair occupied by him at this Board for so many years now vacated forever, we desire to place on record some appreciation of the love and respect we entertained for the deceased. Therefore, be it

Resolved, That with unfeigned sorrow and grief do we lament the death of our fellow-member of this Board and former President of this Society, as an almost irreparable loss to us and to the Society;

Resolved, That in the death of Dr. Stone the profession in this city has had removed from its midst an accomplished member of it, who was both a high-toned, courteous gentleman and a most agreeable companion;

Resolved, That we commend to the younger members of the profession in this city for their emulation the many virtues of the late Dr. Stone—his love for his profession, his solicitude for its honor, his fealty to its ethics, his conscientious practice of it, his liberality to all of its organizations having the well-being and elevation of its members for their object, his integrity in all things, and the honorable position he attained among his fellows and in the community where he had so long resided;

Resolved, That our profound and heartfelt sympathy with his family, in this great calamity that has so suddenly befallen them, be assured to them; and that the Secretary of this Board be directed to transmit to them a copy of these resolutions;

Resolved, That these testimonials of our love, respect, and esteem for our late associate in this Board of Managers be entered in the record of its minutes. (Signed)

Committee, { O. WHITE, JAS. O. SMITH, ISAAC E. TAYLOR.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from July 2d to July 8th, 1876.

SWIFT, E., Surgeon and Medical Director. Granted leave of absence for one month, with permission to apply for an extension of two months. S. O. 123, Dept. of the Gulf, June 30, 1876.

BREWER, J. W., Asst. Surgeon. Assigned to duty at Fort Bridger, Wy. T. S. O. 88, Dept. of the Platte, June 28, 1876.

SMART, CHAS., Asst. Surgeon. Assigned to duty at Camp Douglas, U. T. S. O. 88, c. s., Dept. of the Platte.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending July 8, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
July 1.....	0	5	26	1	17	53	5
July 8.....	0	5	29	1	37	35	8

DR. L. DEFOREST WOODRUFF, a prominent surgeon of this city, died suddenly July 9th, of acute basilar meningitis.

YELLOW FEVER.—Quarantine Commissioner Judd reports that there is not a single well-marked case of yellow fever in the quarantine hospitals.

DR. ROBERT WATTS has resigned his position of Clinical Lecturer on Diseases of Women in the Medical Department of the University of New York.

DEATH OF STROMEYER.—Stromeyer, the distinguished German surgeon, died of apoplexy, June 15th.

Original Communications.

STATE MEDICINE IN ITS RELATIONS TO INTEMPERANCE AND THE INEBRIATE.

By EDWARD C. MANN, M.D.,

MEDICAL SUPERINTENDENT STATE EMIGRANT INSANE ASYLUM, WARD'S ISLAND, NEW YORK.

(Read before the American Social Science Association, at Philadelphia, May 31st, 1876.)

During the past few years scientific men have been earnestly laboring to impress the idea upon the public that more thought and study should be expended in the direction of the dissemination of the knowledge of sanitary and hygienic laws among the ignorant masses, in order that the public health might thereby be improved and disease prevented. This study of the laws of disease as they affect communities and nations is of very recent origin. We have now come to realize that preventable disease exists in a great measure as a result of ignorance and the violation of physical, moral, and intellectual laws, and a neglect of sanitary precautions. We have also come to realize that for the prevention of disease we must remove ignorance by a sound education of the masses, so that they may both understand and obey sanitary and hygienic laws. Then, and only then, will the preventable be converted into the prevented. We check intermittent fever by draining our land properly. We mitigate the ravages of small-pox by vaccination. We prevent consumption by avoiding a damp, wet soil for our residence. We avoid fever by taking care of the sanitary condition of our dwelling-houses and the purity of our water supply. We prevent the invasion of cholera and yellow fever by proper attention to sanitary and hygienic laws, and by quarantine; but there is a disease which tends directly to the destruction of all physical and mental health of individuals, communities, and nations, which preventive or State medicine has seemed thus far powerless to check: that widespread and universal disease—intemperance. We need more efficient and wiser legislation upon this subject; and although the Legislature undoubtedly has the right to interfere with the personal habits or private business of individuals, when these are productive of direct evil to the public, yet I think their wisdom and intelligence should be directed in the channels of the diffusion among the masses of the knowledge of sanitary and hygienic laws and the penalties consequent upon their violation. The public sentiment must be enlightened and changed before prohibitory laws and statutes will avail. When the masses can be made to understand that by intemperance they are destroying not only their own physical, moral, and intellectual health, but that of their offspring, on whom this curse is inevitably entailed by the laws of hereditary transmission, then, and only then, will the disease—for disease it is—be abated.

In all parts of the civilized world man seeks for some stimulus, the results of which are more or less disastrous to his physical, moral, and intellectual health, according as the liquors employed are strong and fiery, or mild and light. This tendency or appetite for stimulants varies with varying climatic law, with race, fashion, and the character of the stimulant used. The instinct or appetite for stimulants we can not annihilate, and our efforts must consequently be directed towards its regulation, so that it may be properly restrained by education, reason, and conscience. It has been determined with comparative accuracy that the prevalence of intemperance is governed by a cosmic law, which consists essentially in the fact that the tendency to intemperance increases, and its effects on man become more disastrous, as we go from the equator, where intemperance is comparatively rare, towards the northern regions of the globe, where it is both very prevalent and its effects violent. The stimulating nature of the climate of northern regions induces, perhaps, a desire for such stimulants, while the stimulating nature of our climate on the Atlantic coast, combined with the extremes of heat and cold, operates very unfavorably in the production of intemperance,—a tendency to which we inherit from our English ancestors. Before entering upon a discussion of the disastrous effects produced by intemperance, it will be interesting to note the habits and tendencies of some of the foreign countries in this respect, with the effects of indulgence in alcohol upon the physical characteristics of such nations. In Italy the inhabitants use light wines and beer, and crime resulting from intemperance is comparatively rare.* In Greece the people use universally the light wine of domestic manufacture, and consume annually about 3,800,000 bottles; yet intemperance is very rare, and in the published register of deaths in the city of Athens, for nine years, only twenty-six deaths of natives are recorded as the result of intemperance, and this out of a population of about 50,000 inhabitants. In Germany wine and beer are in unlimited use, but without apparent detriment to either health or national prosperity. This is owing to climate, temperament, and mode of life. In Turkey intemperance is confined to the Christian population, as the Mohammedans abstain from drink. As the use of distilled liquors in Turkey has been found to be very detrimental to both physical and mental health, native and foreign wines are in use by the Christian population. In Spain intemperance is rare, although Spaniards drink more or less wine, Burgundy, and aquaidiente. In Denmark beer and brandy are much used, and the mental and physical constitution of the people is injuriously affected by this indulgence. Suicides are frequent from drink. The better classes use the European wines in moderation. The effect of the climate and the uniform good nourishment of the people of Denmark prevent the disastrous effects which would otherwise appear from such a consumption of alcohol. In Ireland the poorer and middle classes use whiskey and porter very freely, and the rich use wines and brandies. A majority of the diseases and nearly all of the crime in Ireland is due to intemperance. In England the liquors principally used are gin, brandy, beer, wine, and cider, and intemperance is very prevalent. All the competent authorities in England concur that a large proportion of all the crime, disease, and early mortality is produced directly by intemperance. In Russia intemperance is very prevalent, the principal drink of the common people being "vodka," which corresponds to our whiskey. Wine, brandy, beer, and ale are also made in Russia, and drunk by the higher classes. In Japan the people are

* During the last few years, however, dipsomania has been on the increase in Italy, and there has been a decided increase of cases of the nervous system and brain, resulting from the abuse of alcoholic liquors. This I deem to be due to the fact that the warm, humid temperature, particularly of Rome, relaxes the muscular and nervous system; the blood circulates sluggishly, thus predisposing to disease, if alcohol be indulged in, by reason of the imperfect oxidation of the tissues.

on the whole decidedly temperate. More or less "saki," a liquor brewed from rice, is drunk, but it is largely diluted with water, and drunk in very small glasses. Very little crime results from intemperance, owing to the division of the people into castes. The upper class, or the "Samonrai," refrain from drink, as they do not wish to endanger their chances of promotion by the Emperor, who makes his selection from the wisest or most skilful men of the upper class. Their ambition for promotion, therefore, keeps this class comparatively very temperate, while the lower classes refrain from drunkenness from a fear of offending the upper classes, their lives and property being at the disposal of the "Samonrai." In Scotland whiskey is universally drunk by the lower classes, and the amount of intemperance thereby induced operates in the production of crime, and has a very unfavorable effect on the mortality of this class. An apparent exception to the law spoken of in the beginning of this paper, that intemperance is comparatively rare near the equator, is found in the natives, or aborigines, of Central Africa, India, West Indies, and the tropical islands of the Pacific Ocean. It is stated that in these localities the natives rival any nations of the globe for beastly intoxication and drunken orgies. The descendants of European colonists occupying these countries are, however, uniformly temperate. If we look at the foregoing description of the drinking habits of different nations, we shall see that the greatest amount of disease and crime resulting from intemperance occur in those countries where the climate and the nervous temperament of the inhabitants renders the effect of indulgence in alcoholic stimulants especially hurtful to the brain and nervous system. This is nowhere more noticeable than in our own country, especially on the Atlantic coast, where the peculiarly stimulating nature of the climate induces a peculiar nervous susceptibility which operates in the production of grave diseases of the nervous system if drinking habits are indulged in.

The evils resulting from intemperance in our own country can hardly be overestimated. Inebriety, insanity, epilepsy, delirium tremens, and chronic alcoholism are among the more frequent, while the laws of hereditary transmission are inexorably preparing the way for a generation of drunkards. The amount of pauperism, crime, and disease produced in this way every year is something fearful to contemplate. In New York it is estimated that 33⅓ per cent. of all deaths are due directly or indirectly to the abuse of alcoholic stimulants, of which it is supposed that $60,000,000 worth are annually sold in this country. According to the report of the Special Commission on the revenue, of which Hon. David A. Wells was chairman, the amount of distilled spirits used for drinking purposes in the United States for the year ending June 30th, 1865, was thirty-nine million gallons. They also estimated the increase in the consumption of these liquors at the rate of ten per cent. per annum, which would make the consumption for the year 1870 amount to three hundred and sixty million gallons. If we add to this the imported wines and the domestic distilled spirits that are consumed, we have a consumption of not far from four hundred and ten millions of gallons. Now, would the unlimited introduction of light wines and beer prevent the amount of intemperance caused by the consumption of this enormous quantity of distilled liquor? Far from endorsing the idea that the prevalence of light wines and beer *diminishes* intemperance in such a climate as ours, I believe it directly *promotes* it; as I think a person, especially one inheriting a tendency in this direction, after indulging in wine and beer for some time, feels a growing desire for some more powerful stimulant, and soon resorts to the habitual use of distilled liquors, such as brandy or whiskey. I doubt very much whether the introduction of light wines into this country, free of duty, would induce people to give up the more powerful stimulants. My own opinion, with all due deference to the opinion of others, is, that an unlimited abundance of light wines would result gradually in increased habits of intemperance, and I do not think it would result in diminishing the sale of distilled liquors. The almost universal use of light wines in France has not prevented the people from resorting to absinthe and other strong stimulants. I think in our own country that intemperance begins almost universally with the use of wine and beer, which habit lays the foundation or creates a desire for a stronger stimulant, and that in this way thousands are annually prepared to become victims of inebriety. In the year 1830 a measure was introduced in England, originating, I believe, with the Duke of Wellington, establishing beer-houses, hoping that they would promote the cause of temperance and prevent the consumption of distilled spirits by the masses. Instead of exerting this benign influence, it was decided by English statesmen that it was increasing and intensifying intemperance. Lord Brougham was so much impressed by this that he introduced into the House of Lords a bill for the repeal of the beer act, although he was at first very sanguine about the amount of good it was going to accomplish. The introduction of beer did not decrease the sale of ardent spirits; and all the judicial, civil, and medical authorities united in their testimony of the increased evils arising from this measure. In the year 1872 the editor of the San Francisco *Pacific* wrote as follows respecting the increased use of wines, consequent upon the establishment of the vineyards of California: "The lowest, slowest, most illiterate, most unimpressible, most unimprovable, if not most vicious population, outside of the great cities, is found in the oldest wine districts of this State, and that the use of the products of vineyards has been the most active cause of this condition of the population; that the increased production and consumption of wine on this coast, in the more recent years, has diminished the use of neither distilled liquors nor lager-beer, but rather increased the demand for both." With our national susceptible nervous temperament, the artificial habits of living, the intensity and excitement of life, and the undue predominance of the nervous temperament, which is gradually taking place in successive generations, would the dangers of intemperance be lessened by the unlimited supply of light wines and beer? I think not. I regard inebriety as a physical disease, and I do not believe that a man whose nervous system is diseased by indulgence in alcoholic stimulants will ever voluntarily abandon distilled liquors for light wines. Such a man feels, when depressed physically or mentally, an irresistible desire, impulse, or craving to seek for the relief which he obtains temporarily from the use of alcoholic stimulants; and this relief he cannot obtain from a decidedly weaker stimulant than that he is accustomed to use. The very nature of the disease consists in the gradual development and growth of this abnormal appetite or craving, until it reaches that point where it renders its unhappy possessor blind to the dictates of reason and judgment, and the slave of this irresistible, insane impulse, by which he is impelled by a terrible *vis-à-tergo*, to gratify his morbid propensity. The sooner this disease theory of inebriety is acknowledged and recognized by the public, and the proper sanitary, hygienic, and medicinal remedies are applied

to this disease, the sooner will it disappear and be classed under the head of *prevented* diseases.

EFFECTS OF INTEMPERANCE UPON INDIVIDUALS AND COMMUNITIES.

The effects of intemperance upon the sanitary condition of individuals and communities is very disastrous. This naturally results from the pauperism and crime, and the moral and social degradation of the masses, consequent upon this indulgence in alcohol, which culminates in the ruin of their physical, moral and intellectual health. This is seen most clearly when countries are visited by epidemics, when it is observed that temperate communities resist disease far better than intemperate ones. Intemperance weakens the constitution, so that it cannot resist the poison of cholera, yellow fever, etc. The desire for alcoholic stimulants is often the result of an abnormal constitutional organization. It also appears as the result of ill health, sunstroke, blows on the head or spine, and severe mental shock, in the same way as do other nervous diseases. Alcohol is not either respiratory or accessory food, as it has been claimed to be. Liebig and others maintained that when alcohol was taken into the system it united with oxygen, and that combustion or oxidation ensued, by which it was converted into carbonic acid and water; hence it was termed by him "Respiratory Food." This theory of Liebig was destroyed by the researches of Dr. Prout, of London, who proved by direct experiment that the presence of alcohol in the body directly *diminished* the amount of carbonic acid gas exhaled from the lungs. These experiments of Dr. Prout were confirmed by Sandras and Bouchardet, of France, who repeated them with like results, and also by scientists in our own country. The chemico-physiologists then maintained that alcohol being a hydro-carbon, must necessarily be used for maintaining temperature and respiration, and that its use increased temperature and strength. Dr. Boker, of Germany, then instituted a series of experiments, proving that the use of alcohol retarded tissue metamorphosis, and thereby decreased the excretion or elimination of effete matter, so that from the accumulation of hydro-carbonaceous material the individual increased in weight. This latter fact led certain persons to claim that alcohol was an accessory food—an erroneous idea, which they would have recognized as such, had they observed such individuals carefully; for they would have seen that such persons always exhibit a corresponding decrease in nervous and muscular stamina. It was proved in 1869 by the experiments of Dr. N. S. Davis that, after taking alcohol, either in a fermented or distilled state, the temperature began to fall within an hour, and continued to fall for two or three hours. A few years later, Lallemand, Perin, and Duroy proved, by a series of experiments, that alcohol was absorbed and carried with the circulation throughout the whole body; and also a very important point that it was eliminated as alcohol, unchanged, from the lungs, skin, and kidneys. Others claim that only a part of the alcohol taken is eliminated. We see, therefore, that alcohol has no claim to be regarded as food, as it is not used to build up the tissues of the body, or repair or restore lost nervous or muscular force. It merely diminishes the nervous sensibility of the individual, so that it lessens his consciousness of impressions, and acts as a sedative by retarding tissue metamorphosis. The nervous sensibility is diminished by virtue of a paralysis of the vaso motor and cerebro-spinal system of nerves, which the alcohol causes as it circulates through the body. The use of alcohol, therefore, to recapitulate, diminishes the temperature, the strength and the power of endurance of the individual who takes it habitually, and increases his predisposition to disease. It impresses a peculiarly morbid influence upon the brain and nervous system, which, if the habit be indulged in, becomes a permanent pathological impression, and results in the formation of an irresistible or insane impulse to seek for the relief obtained from alcoholic stimulants. In this state of moral insanity, the control which the intellect normally exercises over the moral senses is overborne by the superior force derived from disease. This permanently diseased state, or dipsomania, is markedly hereditary, and, like insanity, appearing under other forms, it often disappears in the second generation to break out with renewed intensity in the third. It manifests itself in predisposition or simple aptitude; in a latent state; or in the actually developed disease. In the second or latent state, the germ of the disease, which has been inherited by the individual, lies dormant, perhaps, for years, and starts into life in advanced age; as the result of ill health or mental shock, resulting in mental inebriety in a previously healthy and temperate person. This permanently diseased state of the brain is due probably to the interference in the nutrition, growth, and renovation of the brain-cells, which, by the use of alcohol, are unduly stimulated, so that a process of waste and decay is induced, beyond the powers of reparation and renovation. Owing to this impression of a pathological state on the brain-cells, there results a change of healthy function, and disease is induced. The effect of the alcohol is to cause a change in the chemical composition of the cerebral cells from the standard of health, which is the foundation and the starting-point for organic disease. Owing to long-continued use of alcohol, we have resulting: Cerebral hyperæmia, with symptoms of irritation, due to increased excitability of the nerve filaments and ganglion-cells of the brain. At a later stage, we have symptoms of exhaustion, due to lost excitability of the nerve-filaments and ganglion-cells, owing to a want of the proper supply of arterial oxygenated blood to them. Alcohol not only weakens and impairs the functions of the body, but it causes grave nervous diseases, such as insanity, epilepsy, and chorea, and also influences the offspring of intemperate parents in the most unfavorable manner. The offspring of such parents inherit a predisposition or aptitude for some form of nervous disease, the particular form being often determined by causes subsequent to birth. It may be inebriety, insanity, epilepsy, chorea, or a proclivity to crime. These children, offspring of intemperate parents, are generally cursed with a defective, ill-balanced organization, and a weakened, if not actually diseased, nervous system; as a result of which they are predisposed to seek for the relief obtained from alcohol, when depressed mentally or physically. They soon degenerate, become victims to the irresistible impulse, and die inebriates. Insanity from intemperance is on the increase, especially in England, where it shows an alarming increase, judging from the last reports of one of the largest asylums, the Crichton Royal Institution, where in the last five years the admissions due to intemperance have risen from 8 per cent. to 35 per cent. The Medical Superintendent, Dr. Gilchrist, remarks, that "doubtless a more minute analysis would largely increase the proportion of those in which the excessive use of stimulants, by the patients themselves, or by their parents, constitutes an important, if not the primary factor in the production of mental disturbance." In order to successfully combat all these manifold evils which we have seen result from intemperance, we need to educate

the public up to the universal acceptance of and belief in the fact that alcohol, instead of being a tonic and restorative to the system, is a narcotico-irritant poison; that it has no analogue in the human system; and that its continued use will *inevitably* result, not only in the impairment of the mental and physical health of the individual himself, but also that of his offspring. When the public come to take this view of the subject, and come to believe that mind and body are debilitated, instead of nourished and renovated, by the habitual use of alcoholic liquors, public sentiment will then be adequate, without the necessity of prohibitory laws, to the prevention of intemperance.

INEBRIATE ASYLUMS AND CARE OF THE INEBRIATE.

We have already spoken of the necessity of wise legislation tending to the prevention of intemperance; but what shall we do with the Inebriate? It becomes a grave question relating to the political economy of the commonwealth as to the annual loss entailed on the State by the loss of the labor of inebriates. The average longevity of a man at 20 years of age, if temperate, has been estimated at 44.2 years; while if intemperate, his average life is reduced to 15.6 years. If an inebriate at 20 years of age is not reformed or cured, the State loses his earnings for the 44.2 years which he would have made if temperate; and there is also an expense entailed, for his care, on his family or the State, for the 15.6 years remaining as his average life. When we reflect upon the extent of intemperance throughout the commonwealth, we see what an immense loss is suffered by the State by such a waste of productive power, and what a grave financial problem this subject becomes when viewed in this light. We need, in every State of our country, to establish State inebriate hospitals, adapted in construction, location and surroundings to the special needs of this class of unfortunates, so as to enable them, with the assistance of wise superintendence, to regain their lost self-control and manhood, and have their weakened and diseased minds and bodies properly strengthened and cured. In this way a great annual expense would be saved to every State, by materially lessening the number of paupers, idiots and criminals, to say nothing of the destitute children, and that percentage of the insane who have been rendered so by the abuse of alcohol. If one-tenth part of the sum annually appropriated in each State to almshouses, hospitals, prisons and asylums, should be appropriated to the reform and cure of inebriates, the expenses of the above-named institutions in a short time would be very much lessened, by the decrease in admissions, which would be the natural result of a decrease in the *causes* of pauperism, crime and disease. If, in addition to building Inebriate Hospitals in every State, the Legislature of such States would pass such laws as would enable the public guardians to put into active operation remedial restraint, so that inebriates should be committed in precisely the same manner as are the insane, and held for treatment until the superintendent deemed them fit to take their place in society, we should then soon have accomplished great good in the permanent reformation and cure of men who are admitted with broken-down nervous systems and shattered constitutions. To do this, military discipline, good hygienic influences, cheerful, tranquil, and pleasant surroundings, and regular exercise, both bodily and mental, are among the indispensable indications for treatment, while the superintendent will be best able to judge of the special needs of individual cases. There should be no half-way or sentimental measures adopted in the confinement and treatment of inebriates. The public must understand that inebriation is a type of insanity; and that in all cases, prompt and effective measures will be taken to prevent such individuals from ruining themselves and injuring society. That in all cases prompt measures will be taken to confine such persons in an institution for the cure of inebriates, by law; and that, when there, they will be under strict discipline, which will require and enforce both physical and mental labor, as they are a class of patients, for whom, in my estimation, not less than the insane, physical and mental labor is absolutely necessary for restoration to health. An inebriate who is allowed to idle away his time will never acquire that mental and physicial stamina which is requisite for his reformation and cure. He will only degenerate; and on his discharge will relapse into his former habits. An inebriate asylum where the patients cannot be detained by law until cured, loses much of its efficacy. It must be understood that the inebriate is suffering from a physical disease, and that he is committed to an inebriate hospital to stay until cured, whether that cure takes for its completion six weeks or six years; and that when in such an institution he is to submit to the discipline of the house. If the question be raised, How can you tell whether your patient is cured? I reply, that when reasonable hopes are entertained of the cure of a patient,—when we think that we have given our patient new blood, bone, muscle, and *mind* enough to take care of himself, his family, and his property, then, I would do as I am in the habit of doing with my insane patients, send them out on pass—on trial—still maintaining a legal control over them, and when it is clear that they are going to do well, discharge them. With the insane I have found this plan to work well; why not with the inebriate insane, if they are in like manner legally committed upon admission? For the successful treatment of inebriety, as with insanity, it is necessary to send the patient for treatment in the early and curable stage of the disease. Like insanity, inebriety, if treated in the early and curable stage, ought to give a much larger percentage of cures than it now does; while if the patients are sent for treatment after years of disease, they present small chances for recovery. Yet people do not wish to send their friends for treatment to such an institution until they have become confirmed sots, and beyond all hope of reformation and cure. Such cases should be sent to an *asylum*, and should not be allowed to cumber up the wards of an inebriate *hospital* where we send patients, not to *keep* but to *cure* and return to society. Finally, the Legislature should, in dealing with this question, in addition to legislating in the direction of the dissemination of knowledge among the masses, as to the nature and effects of alcohol, deal with its indiscriminate sale, just exactly as it does with the sale of arsenic or prussic acid, for it is just as surely a deadly poison. Arsenic is sometimes used as food to increase flesh and impart brilliancy to the eye and complexion, but is it not a deadly poison? Opium and haschish are also used, for their effects, in the same manner, but is not their sale restricted, as with all other poisons? The Legislature must appreciate the fact that the use of alcohol is a form of suicide, and must legislate in this direction. No other form of prohibitory statutes will ever accomplish the desired result. I have already alluded to the fact that it becomes at times a very difficult task to convince a man's family that he is a proper subject for an inebriate asylum. I deem it a sacred duty that in such cases devolves upon the governmental authority, to protect society, as in the case of other insanities, against danger, either existing or being

apprehended, such as can be avoided by precautionary and preventive measures, and to protect in his rights of person and property the individual citizen who, from whatever cause, is unfortunately so far impaired in his physical, mental, or moral faculties, as to render his uncontrolled movements alike prejudicial to his own interests and those of society.

NEPHROTOMY FOR THE RELIEF OF PYO-NEPHROSIS—RECOVERY.

By MARK H. WILLIAMS, M.D.,

NEW YORK.

W. H. P., æt. 32, New York; single, printer. Was first called to see patient February 14, 1876, because of a "severe back-ache," which he had endured the previous two weeks, and had attributed to a "cold" resulting from lying on dampened paper while perspiring. He had continued at work until one week ago, and was now obliged to remain in bed, chiefly on account of "general weakness and the pain in his back." Four days ago he had a chill, followed by fever, which has since continued, with daily afternoon exacerbation, terminating later by free perspiration, during which time he suffered less pain.

He gives a favorable antecedent history, being unable to recall any illness that necessitated indoor confinement until within a comparatively recent period. Fifteen years ago a muco-purulent urethral discharge was consequent upon an original indulgence—his only mishap, which proved to be of short duration, and was not followed by stricture. Six years ago, while in China, he dates his first illness, an attack of yellow fever, from which he made a speedy and satisfactory recovery.

Two years ago a rather formidable furuncular eruption appeared on his back, to which poultices were applied, healing rapidly after purulent discharge. In a few weeks this was followed by another crasis showing itself in an isolated manner on arms and legs, disappearing as before under the same local treatment. Although causing him great discomfort, these eruptions did not seem to reduce his general physical vigor; he ate well, and retained his average weight of 160 pounds. In the course of six months the engendering cause was expended, and during the following year he had entire immunity from all "fleshly ills," enjoying excellent health.

Five months ago several deep-seated indurations, attended with pain, and a gradually extending areola, appeared in the posterior tibial region of both legs, the consequent duration of which was evidently limited by free incision, and the internal administration of the solut. hydg. iodid. comp., although no previous specific history could positively be determined.

On the occasion of my present visit I found the patient in bed, lying upon his back, with right leg drawn up, and a peculiarly wearied expression of countenance. His skin was dry and hot to the hand. Tongue thickly furred, yellowish brown in color, and dry. Pulse, 120, temp. under tongue, 103° F.

Constipation had been marked for the past ten days. No change in the quantity of urine voided had been observed. On examining back no pain was caused by pressure over vertebra, or in the left lumbar region; but on being increased over right lumbar space, and particularly over a point two inches to the right of the fourth lumbar vertebra, the pain was so severe as to cause him to cry out. To relieve his present distress, I gave him a subcutaneous injection of morphine, applied wet cups, and advised frequent hot poultices over seat of pain.

A specimen of urine brought me, after standing several hours, was seen to be of dark straw color, containing a flocculent whitish deposit, sp. gr. 1.012, acid. With heat and nitric acid, ¼ albumen in volume. Under microscope, a few blood-corpuscles and a great profusion of pus-cells, with several uric acid crystals and a doubtful spindle-shaped cell (the only one observed at any time); these examinations were daily repeated without further result.

Feb. 21st.—During the following week no marked improvement was manifested. His daily temperature ranged from 102 to 105; pulse averaged 120; considerable thirst; his tongue is more moist, but a dry brown streak continues along median line; has no desire for food; fæces hard and dry, and skin sallow. Diet limited to milk and Saratoga vichy, of which he drinks from three to four pints daily, without relief to his constipation or acid condition of urine; has occasional vomiting; no jaundice, and no abnormal condition other than in right loin, excepting some pain closing the act of micturition, referred to the root of the penis, and for which he requests relief. Examinations of urine present about the same features, with an increased amount of pus. Poultices to back continued; occasional milk punch, and to take 5 gr. quinine with 40 gtts. tr. ferri mur. every six hours.

Feb. 28th.—The patient seemed to improve during the third week; his average temperature was lower, and he had some desire for solid food. He was still annoyed with the smarting after voiding urine, but in a less degree. Complains of swelling of right testicle, with pain at irregular intervals. To apply leeches and poultice.

At this time his urine was lighter in color, and the amount of deposit greatly diminished; the gradual improvement being more perceptible by placing in regular order the three last daily specimens; and under the microscope but few pus-cells could be found. Its reaction was still acid, and albumen remained.

He expressed himself as feeling better than he had at any time during his illness, and urged me to allow him to leave his bed for a reclining chair. Although in a feeble condition, I acceded to his request, and a position by the window afforded him a few hours' relief.

The freedom from pus discharge continued some three days, when it reappeared in increased quantity. This tended to confirm the provisional diagnosis of calculous pyelitis. It was now apparent that the pelvis of the affected kidney was undergoing dilatation (pyo-nephrosis) as a result of imperfect escape to the constantly formed purulent secretion; but to arrive at a perfectly satisfactory conclusion as to the cause, nature, and location of this obstruction was a more difficult matter. In accordance with the symptoms and microscopical evidences, it seemed plausible that a *renal calculus* was the source from which this man's condition resulted. The patient had sat up but one day, and in the latter part of the week pain extended down through right inguinal region to inner side of thigh; he had diminished muscular power in right leg, with *numbness* of three outer toes.

March 6th.—During the fourth week he rests entirely on his right side, unable to lie upon back because of increased pain. The right leg is extended, and he can flex it only with assistance, the movement causing no pain. Urine is voided freely, and no distress follows the act. On employing a searcher, no cause could be ascertained for the bladder tenesmus

he had experienced; the urethra was not unusually sensitive at any part, and no complaint was afterward made against a rather prolonged examination.

March 13th.—The only interesting note of this week's progress was the return of the pain and swelling in the right testicle, which was relieved previously by local abstraction of blood and the application of poultices. On Saturday, March 18th, the testicle measured, in its long diameter, three inches, and transversely, two inches; it was of stony hardness, hot, and very sensitive to pressure; at the lower and inner border the scrotum was adherent, and an obscure sense of deep-seated fluctuation was obtained; this part was freely opened, giving exit to about two drachms of thick, creamy pus; lint was introduced. It healed by granulation, and no further trouble resulted from this source.

At this time the *right side*, measured from the spin. proc. of vertebræ to the median abdominal line, exceeded that of the corresponding left side one inch. Slight bulging was apparent posteriorly, at previous point of greatest pain, on pressure. This enlargement was felt to be firm, and somewhat elastic, and measured, on a line with the inf. angle of scapula, from ninth rib downward, *seven inches;* laterally, from within two inches spi. proc. vertebræ toward median abdominal line, *eight inches.* A fluid tumor was evidently present, although the precise nature of its contents was as yet undetermined.

On Tuesday, March 22d, Dr. J. H. Ripley (to whose valuable advice the subsequent good result is largely due) was called in consultation, and, after obtaining pus by an exploratory puncture with a small aspirating needle, confirmed the diagnosis, and advised a free incision into the kidney, if necessary, rather than simply removing the accumulated pus by aspiration, and Friday, three P.M., was agreed upon for this operation.

The condition of the patient was now extremely critical. During the past week quinine had had no effect upon his high temperature, and hectic, followed by profuse sweating, was of daily afternoon occurrence. He was much emaciated, very pale and feeble, exhausted after speaking but a few words, rarely above a whisper. Aphthous patches in mouth were scattered over tongue, cheeks, and fauces; commencing bed-sores over right trochanter and at sacro-lumbar articulation. This discouraging condition, with no other prospect of relief, caused him to readily acquiesce in any measure that promised to improve his chances of recovery; his only stipulation being that he should not suffer further pain. His nurse was instructed to collect all the urine passed in the ensuing twenty-four hours, that it might be compared with that following the operation. It was found to measure 64 oz., sp. gr. 1.018, acid; one-third purulent deposit; the supernatant clear fluid containing one-fourth albumen.

March 24th, 3 P.M.—*Operation.*—Present, Drs. J. H. Ripley and V. P. Gibney.—Two ounces of brandy, with half a drachm of bromide of potassium, was given patient, after which Dr. Gibney kindly proceeded to place him under the influence of ether.

The particular operation determined upon was that suggested by Thomas Smith, in a paper on "Nephrotomy as a means of treating Renal Calculus," *vide Med. Chirug. Trans.*, April 27, 1869, in which the details are given with commendable particularity.

Patient being placed upon the table, and turned upon his left side, an incision was made, beginning at the last rib, three and a half inches from the spi. proc. vertebra, and extending downward four inches to the crest of the ileum, dividing successively the skin, areolar tissue, latissimus dorsi, serratus posticus inf., and the fascia transversalis. At this point sanious pus discharged freely, of strong ammoniacal odor, three pints of which were collected. On lengthening inner line of incision, the fingers could be readily introduced, and search was made for the kidney, which was found, after some difficulty, diminished in size, bound down by adhesions, bluish-red in color, and compressed against the posterior abdominal wall. Three openings, corresponding to the infundibula, were found leading from the convex border to the pelvis of the kidney; sinuses through which the over-distended organ had furnished an outlet to the pus contained. Repeated exploration was made by myself and the gentlemen present, but no calculus was obtained. The evacuated pus left a cavity, the measured dimensions of which were:

Upward and outward toward vertebræ..4 inches.
Upward, inward, and anteriorly.....6 "
Downward, inward, and anteriorly.....8 "

The amount of hemorrhage was slight, and no vessels required ligation.

Time occupied during operation, fifty-five minutes. The patient's condition was now so depressed that further investigation was deemed unadvisable. A pledget of oakum was interposed between lips of wound, covered with a large compress of same, over which adhesive strips were placed, and these supported by an abdominal bandage. When placed in bed his skin was blanched, and his pulse feeble and irregular.

5 P.M.—Pulse 140, temp. 98½.—Is partially conscious, but does not rally well; skin is cold, moist, and of leaden hue; he is warmly covered, has mustard over epigastrium, hot bottles to feet, and is given two ounces hot brandy.

6 P.M.—Circulation improved; says he feels more comfortable, but weak; is very thirsty; there has been no vomiting during nor since operation.

11 P.M.—Pulse 74, temperature 98½°.—Since 6 P.M. has taken ℥ iij. brandy, some beef-tea, and a glass of milk and lime-water. Skin is warm and moist, pulse more full and regular; rests upon back with ease, the first time in six weeks, and expresses himself as feeling better than last night. Has passed 12 ozs. urine, of darker color than usual. Oakum compress exchanged; drainage free; 15 ♏ Magendie's solution hypodermically to insure sleep.

March 25th, 10 A.M.—Pulse 110, temp. 100°.—Dr. Ripley present.—Passed the night in refreshing sleep, awaking only for drinks. At 6 A.M. passed ℥ viij. dark urine, containing considerable pus. Was removed from bed to table, to allow clean bedding, and cavity was thoroughly irrigated with ½ solution carbolized water, washing out pus and several blood clots; there is no offensive odor, but at orifice urinous smell still present. *Careful but thorough probing failed to discover any calculus.* Wound dressed as before.

9 P.M.—Has not had usual hectic flush this afternoon, but some sweating. Passed urine twice, ℥ viij. each time, lighter in color, and diminished deposit. Total amount of urine passed in the twenty-four hours succeeding operation, 50 ounces, of sp. gr. 1.018, acid. Has eaten some raw oysters, and drank milk punch freely. Right leg still extended and powerless. Was given 15 ♏ Magendie's solution hypodermically.

March 26th, Sunday, 10 A.M.—Pulse 110, temp. 99¼°.—Dr. C. W. Rush present.—Slept well, and feels comfortable. Aphthous spots in mouth improving. On removing dressing about 6 ozs. sanguinolent fluid escaped, with but little pus; the returned irrigating fluid was highly colored. Transudation was readily traced to the previously compressed kidney, which

was now considerably enlarged, as a result of established circulation, and oozing was taking place from its bright red granulating surface.

March 27th, 10 A.M.—Pulse 100, temp. 100°.—A single glance at the wearied expression of patient showed him to be not as well. He had slept satisfactorily, but complains of feeling worse, although he cannot define any particular distress. His skin was bluish, lips pale, nostrils dark and dry; uncovering wound the odor was fetid, and two ounces thick pus with some blood escaped. He was quickly attended to, and replaced in bed, given brandy, and soon felt much better. Temperature lowered to 99° in one hour. His depression was evidently due to deficient drainage.

March 28th, 5th day.—Pulse 110, temp. 98½°.—Dr. C. W. Rush present.—This morning had first fæcal evacuation since operation, which was composed of small, dry, hard masses (scybalous); slept two hours on left side; lies most of the time in left latero-dorsal position; eats quite heartily of meat and vegetables, and takes freely of milk punch; speaks with chest voice, and less effort; both legs drawn up unaided. Says he feels better than he has for a month, and is confident of complete recovery.

March 31st, 7th day.—Pulse 110, temp. 99°.—Dr. C. P. Tucker present.—Is doing well; has solid fæcal evacuation daily. A drainage-tube was introduced, two inches long, one inch in diameter, with flaring inner extremity and a wide fenestrated flange externally, secured by tape passing around abdomen; has an extensive miliary eruption over buttocks and abdomen.

April 4th, 11th day.—Pulse 100, temp. 98½°.—Drs. Ripley and M. J. Baker present.—Steadily improving. Is anxious to sit up in chair. Passes two pints of urine daily, free from albumen. Some pus-corpuscles still present.

April 20th.—Is gaining flesh rapidly. Has had a most voracious appetite during past two weeks. A zinc drainage-tube, of the same diameter but flattened, has been substituted, facilitating cleanliness by frequent removal. The previously displaced contents of right lumbar region have resumed their normal position. He is quite strong, and walks daily to the dining-room for meals.

April 28th.—Walks out daily, and is not fatigued; thinks he is in as good condition as he ever was. His present weight is 160 pounds. During the past four days he has gained five pounds. A small gutta-percha tube, with a perforated soft rubber tube attached, is in wound, although the amount of drainage is inconsiderable. He passes normal amount of urine daily, and several examinations have failed to reveal any element that might give rise to doubt regarding the perfect success of the means which contributed to his recovery.

May 15th.—Wound completely closed. Has returned to his work, which he pursues without inconvenience.

Remarks.—These notes were prepared for publication before I became familiar with the details of the case reported by Dr. Geo. A. Peters, in the *N. Y. Med. Journal*, Nov., 1872, with which in several particulars I thought they closely corresponded. The respective patients were males, of nearly the same age, and the right kidney the seat of disease in both cases. *Strong presumptive evidence of renal calculus—none being obtained*—and abscess affecting testicle of same side, previous to operation. As regards the openings from the convex surface to pelvis of the kidney, the amount of pus and distention was greater than in his case; had he deferred operating one week longer, the objective condition of the kidneys would have been similar. He writes of "adhesions binding it down on all sides. *Several* fluctuating points were discovered on the surface of the kidney, into one of which a small exploring trocar was introduced, and an inconsiderable amount of pus was withdrawn, but no stone was felt."

The main points of interest in this case, briefly summarized, are:

1st. The possibility of not being able to obtain calculus, when all available means of diagnosis lead one to infer its existence.

2d. The difficulty in determining previous to operation the condition of calculous, tubercular, or other varieties of pyelitus.

3d. The persistence of acid reaction of urine during the liberal administration of alkaline solutions.

4th. Preference of free incision over aspiration.

5th. The abscess of testicle; was this due to pressure upon or other interference with the function of the genito-crural nerve?

6th. The destructive changes that had taken place in the kidney, the extensive burrowing through soft parts, the relief given by operation, and the rapid convalescence.

7th. Total absence of vomiting following the administration of bromide of potassium, previous to ether inhalation, as proposed and used several years ago in the Charity Hospital.

The want of a proper nomenclature for kidney operations, which would be self-defining and readily comprehended, is much needed. The term nephrotomy might be limited to those cases when the operation by incision is undertaken with the object of relieving abnormal conditions existing within the kidney; the word itself defining the particular organ operated upon, as in cystotomy, gastrotomy, urethrotomy, etc.; while *lumbar section* would refer to the relief of conditions existing external to the kidney, and with which the organ does not enter as a complication.

I have been able to collate the following recent cases of nephrotomy:

Dr. W. W. Dawson, Ohio: female, æt. 50. Reported in *Hays' Jour.*, Jan., 1873. Death, fifth day.

Dr. Geo. W. Callender, Edinburgh. Reported in *Hays' Jour.*, Oct., 1874. Death, third day.

Dr. F. D. Lente, New York, awaiting publication. Reported "doing well."

Dr. John J. Crane, New York: male, æt. 31. Reported in MED. RECORD, Aug., 1874. Death, fifty-two hours.

My case as here recorded: male, æt. 32. March, 1876. Recovery.

The operation of extirpation of the kidney is one attended with greater difficulty, and with less chances of success, than in simple nephrotomy, as defined above. Of these I can find recorded but four cases, namely:

G. Simon, Heidelberg, 1870: female, aged 26. Reported in *Deutsche Klinik*. Recovery.

Dr. Linsen, Berlin, 1870: male. Reported in *Hays' Jour.*, May, 1872. Death, ten hours.

Dr. Durham, London, 1872: female, aged 43. Reported in *Brit. Med. Jour.*, May, 1872. Death, seventh day.

Dr. Geo. A. Peters, New York, 1872: male, aged 36. Reported in *N. Y. Med. Jour.*, Nov., 1872. Death, sixty-five hours.

Progress of Medical Science.

The Contagiousness of Whooping-Cough.—Dr. Sturges, of Westminster Hospital, recently devoted a clinical lecture, which is published in *The Lancet* of May 20th, to the consideration of the nature of the contagion in whooping-cough. He rejects the theory of specific poison, of contagion carried by a material agent, and contends that it is a nervous affection, infectious in the same way as the emotions of fear, pity, and discontent, and as the acts of yawning or laughing, or of coughing during church service. So also other nervous diseases, as hysteria, chorea, and sometimes even epilepsy, are infectious. "Catching a habit" is a proverbial expression that may often be properly applied to disease. Pertussis in a hospital does not spread from bed to bed, but skips about here and there, from one ward to another. Dr. Sturges believes that we are liable to different nervous disorders at different periods of life, and that the period of liability to whooping-cough lies between the second and sixth years of life, not spread over that time in each individual case, but falling somewhere between these limits. When whooping-cough enters a family, infants and older children generally escape, the former because they have not yet reached the period of liability, the latter because they have passed it. The whoop is notoriously recurrent as long as the catarrh accompanying it continues; relief is never permanent until the lungs are quite free and the cough gone. On the other hand, once cured it is not apt to return again, although the patient may suffer from a precisely similar catarrh. This is not because whooping-cough confers anything that prevents its return in the future, but because the human subject continues prone to the disease hardly more than two years, and when that future arrives the child has outgrown its liability. Dr. Sturges closed his lecture with the following conclusions deduced from his preceding remarks:

1. Whooping-cough is a nervous disease of immature life, due immediately, like nervous asthma, to a morbid exaltation of sensibility of the bronchial mucous membrane. Although possible in a modified form at all ages, it has its period of special liability and full development simultaneously with that time of life when the nervous system is irritable and the mechanism of respiration diaphragmatic. A child of the proper age with catarrh and cough is thus on the very brink of whooping-cough. A large proportion of such children will develop the disease for themselves upon casual provocation, all contagion and all epidemic influence apart.

2. The whoop of whooping-cough is due to a spasmodic contraction of the diaphragm which follows its extreme relaxation with the emptying of the lungs by spasmodic cough, the force of the inrush of air being met by a conservative spasm on the part of the glottis.

3. The natural history and relations of whooping-cough—its uneven course, indeterminate duration, method of recovery and cure, frequent absence of pyrexia, and seasons of prevalence—are in striking contrast with diseases of the zymotic class. Admitting the fact of its contagion, the great commonness of the disease and its association with epidemic catarrh, coupled with the popular belief that its source of infection may be indefinitely remote, are circumstances which must combine to render whooping-cough more contagious in appearance than it is in fact.

4. In its character as a purely nervous disease, whooping-cough may very well be contagious like other nervous affections of a quasi-voluntary kind. The assumption of a specific morbid poison is both hypothetical and gratuitous, or so nearly gratuitous that the facts it seems to explain are insufficient to counterbalance its inherent improbability.

5. The non-recurrence of whooping-cough is not in strictness analogous to the non-recurrence of contagious fevers, nor out of real harmony with the pattern of nervous disease. It is the rule that affections of this class alter their shape with the successive epochs of life, so that each will appear either solitary or recurrent, according as the time allotted for it is shorter or longer. The after-infancy period to which whooping-cough attaches is one of brief duration and special liabilities. The features of the disease are in strict correspondence with the characteristics of its time of life.

6. The specific remedies for whooping-cough (which have their season and may be said now to include all drugs whatever of any potency) have all of them a certain testimony in their favor. They agree in a single point: whether by their nauseousness, the grievous method of their application, or the disturbance they bring to the child's habits and surroundings, the best vaunted remedies—emetics, sponging of the larynx, ill-flavored inhalation, change of scene, beating with the rod,—all are calculated to *impress* the patient, and find their use accordingly.

A Knife-blade carried for Years in the Pleural Cavity.—Dr. Carl Bleiweis, of Leibach, reports that at the autopsy of a patient about thirty years old, who had died of pulmonary consumption on July 8th, 1875, a knife-blade was found in the left pleural cavity. It was three inches long, half an inch wide, and was lodged between the third and fourth ribs, at the inner border of the left scapula, lying in a slanting position and the edge forwards. The wound by which it had entered was indicated by a small and now adherent cicatrix about an inch above. This patient had been an inmate of penal institutions for about half of his life, and the reporter states from personal knowledge that the wound had not been received within four years of his death, and the presence of the foreign body was wholly unsuspected by those who had charge of him, the patient doubtless having reasons for not calling attention to it. Further inquiry rendered it probable that the injury was received in a quarrel in 1868 or 1869. The reporter does not regard the foreign body as the probable cause of his phthisis.—*Memorabilien, XXI. Jahr.* 20, 1876.

Treatment of Prolapsus Ani in Children.—Prof. Henoch, of Berlin, treats this affection very successfully with hypodermic injections of strychnia and ergotine. He dissolves $\frac{1}{10}$ of a grain of sulphate of strychnia in 2½ drachms of distilled water, and injects daily in the neighborhood of the anus from three to six minims—$\frac{1}{10}$ to $\frac{1}{5}$ grain strychnia. This remedy is in some cases remarkably successful, but in other cases it fails entirely. Ergotine seems to act more certainly. He injects daily a quarter, or a half, or even an entire syringeful (Pravaz's) of a solution of the strength of one to ten. The professor advises that when the child goes to stool, the chamber be arranged on a table or chair, so that the legs will hang free. This will prevent, to a great extent, the straining action of the abdominal muscles.—*Allgemeine Medicinische Central Zeitung*, May 31st, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, July 22, 1876.

BAXTER'S STATISTICS.*

It should be a matter of congratulation with statisticians and medical men generally that the examinations of recruits and drafted men during the late rebellion are now made available for scientific study. We are hardly surprised, in view of what we have seen done by the army medical bureau at Washington, to find the work of Colonel Baxter the most complete of its kind that has ever been published. Two immense quarto volumes are before us, filled with figures, charts and maps, systematizing and elaborating the anthropological and medical conditions of nearly a million of men who were examined for admission in the late army of the rebellion. These examinations were made by authority of the different States furnishing the recruits, but they were generally found to be so unsatisfactory in their results, owing to a want of uniformity of system and centring of responsibility, that Congress passed an act in March, 1863, creating a bureau of the War Department, known as that of the Provost-Marshal General's. A complete enrollment of all the States was then made; and in order that none but able-bodied men should be placed in the field, a medical branch of the Provost-Marshal's Bureau was established, and to it was assigned the authority and responsibility of thorough and systematic medical examinations. This medical bureau was placed in charge of Col. J. H. Baxter, from its inception to the end of the war. The great value of the statistics which had been collected during that time was then prospectively presented in a "report of the medical statistics on file," and the impression made upon the government was such that Col. Baxter was directed to continue his labors and make a complete report. Under the system adopted by him and carried out by the surgeons of the boards of enrollment, a most complete systematic account of every individual examined was obtained. To give some idea of the comprehensiveness of the plan, it is only necessary to refer to the fact that in the blanks furnished to examiners the following conditions were to be noted concerning each recruit or drafted man: Date of examination, designating number, name, age, nativity, occupation, height, complexion, color of eyes, color of hair, girth of chest at inspiration and expiration, social condition, color, general physical constitution or physique, whether a volunteer or substitute, result of examination, specification of disease when rejected, and if accepted, the noting of any distinguishing natural or accidental mark by which the recruit might be identified. In fact the proper filling up of this blank gives the physical likeness of the individual examined, and constitutes an accurate and thoroughly trustworthy descriptive list.

The intrinsic value of the statistical data not only rests upon the circumstances of its uniform and systematic detail, but also upon the fact that the examinations represent the mean condition of the people as a whole, every class being well represented, either in the wide-spread offering of volunteers or in the accident of a general draft.

In order to make the comparison of each of the physical conditions with the others noted, easily comprehended, the plan of giving ratios expressing the relation that one number bears to another has been adopted, and as these ratios are millesimal, their simplicity and accuracy can scarcely be questioned. The labor in calculating these ratios, considering the different and multitudinous comparisons to be made, has been, as might have been expected, immense. Col. Baxter makes the following statement in regard to this point, which is full of significance as an earnest of his intention to make the deductions of his figures valuable: "The labor of computing all these ratios has of course been very great; over a hundred and thirteen thousand calculations, in which the decimal was carried out four places, having been made and carefully verified by the ordinary method, and by the addition of the results obtained, which, if correct, would agree with a larger ratio obtained in another way." He further says: "For convenience in estimating, the tables may be put into six classes, as follows: the first class consisting of Tables 1, 2, and 3; the second of Tables 4, 5, 6, 7, 8, and 9, the third of Tables 18, 19, and 20; and the sixth of Tables 21, 22, and 23. To produce the tables of the first class in their present form, three thousand five hundred *preliminary* tables had to be made. These preliminary tables contained, in the aggregate, three million five hundred thousand sets of figures, or independent num-

* Statistics, Medical and Anthropological, of the Provost-Marshal-General's Bureau, derived from Records of the Examination for Military Service in the Armies of the United States during the late War of the Rebellion, of over a Million of Recruits, Drafted Men, Substitutes, and Enlisted Men. Compiled under direction of the Secretary of War, by J. H. Baxter, A.M., M.D., Colonel and Chief Medical Purveyor U.S.A., late Chief Medical Officer of the Provost-Marshal General's Bureau. In two Volumes. Washington: Government Printing Office. 4to, pp. 1165.

bers, and were condensed into twenty-four intermediate tables—one for each nativity—which contained one million four hundred and forty thousand sets of figures, exclusive of eleven thousand ratios; and these twenty-four intermediate tables were condensed to form Tables 1, 2, and 3, and presented in this report."

Although the statistics of the tables is comparatively easy of comprehension by the ratios given, even the mere mental comparison of abstract numbers is made unnecessary by the arrangement of charts, which present, by horizontal tinted columns of different lengths, a ratio of difference corresponding to the proportions per thousand as expressed in the figures. In addition to these charts showing the comparative anthropological and medical conditions of the men examined, we have beautiful maps, differently colored, and graded in shade to picture the prevalence of different diseases in the different Congressional districts. This may be called scientific object-teaching on a large scale, and will constitute the most interesting and valuable feature of the work for the ordinary student of anthropology, giving the general conditions, physical and regional, which are associated with the prevalence of disease in this country.

Any attempt at an extended analysis of the conclusions to be drawn from the immense array of statistical facts presented in these ponderous volumes, would be, of necessity, incomplete; but we shall try, in a cursory way, to present a meagre outline of the ratio of disease to occupation, and to social and physical conditions, leaving the gaps to be filled up by the patient study of those who are interested in these kind of investigations.

In order to avoid unnecessary repetition, we shall name in order the ratio of disease as connected with the different conditions named, giving three of the highest grades in each. For instance, the chart of General Diseases in connection with occupation, the highest ratio is represented by the following in the order named: (1) Editors, (2) Teachers, and (3) Watchmen. This plan of enumeration being understood, we present it in abstract under the respective headings:

General Diseases as to locality: (1) Massachusetts, (2) Maine, (3) Rhode Island. Nervous diseases, as to locality: (1) Rhode Island, (2) New Hampshire and Connecticut. In the consideration of the highest ratios of special diseases in the different States we also express them in numerical order:

Phthisis pulmonalis.—(1) Maine, (2) New York, (3) Connecticut. *Paralysis.*—(1) New Hampshire, (2) Maryland, (3) Rhode Island. *Insanity.*—(1) New Hampshire, (2) Rhode Island, (3) Maine. *Hernia.*—(1) Minnesota, (2) Rhode Island, (3) District of Columbia. *Syphilis.*—(1) Rhode Island, (2) District of Columbia, (3) Maryland. *Diseases of the Eye.*—(1) Missouri, (2) Illinois, (3) Massachusetts. *Diseases of the Ear.*—(1) Minnesota, (2) Maryland, (3) Massachusetts. *Diseases of Respiratory Organs.*—(1) Rhode Island, (2) Connecticut, (3) Massachusetts. *Diseases of Digestive Organs.*—(1) Minnesota, (2) Massachusetts, (3) Vermont. *Diseases of Circulatory System.*—(1) Maine, (2) Rhode Island, (3) Massachusetts. *Diseases of the Organs of Locomotion.*—(1) Maine, (2) Massachusetts, (3) New Hampshire. *Diseases of Urinary System.*—(1) Massachusetts, (2) Maine, (3) Connecticut. *Diseases of Generative System.*—(1) Massachusetts, (2) Maine, (3) Rhode Island. *Diseases of Cellular Tissue.*—(1) Rhode Island, (2) Massachusetts, (3) Maine. *Diseases of Cutaneous System.*—(1) Illinois, (2) Missouri, (3) Minnesota. *Local Injuries.*—(1) Maine, (2) Delaware, (3) Missouri. *Internal Organic Diseases.*—(1) Missouri, (2) Kentucky, (3) Illinois. *Diseases and Injuries of Nose.*—(1) Maryland, (2) Delaware, (3) Minnesota.

In regard to the social condition, the married men showed the highest ratio of disease of every class except syphilis. The reason for this undue preponderance of diseases is probably owing to the fact that the very large majority of volunteers and drafted men were at that age in which matrimony was the rule rather than the exception.

In regard to the influence of occupation upon the different diseases we have the following remarkable exhibit:—

Chronic Rheumatism.—1. Liquor Dealers; 2. Photographers; 3. Brokers. *Syphilis.*—1. Sailmakers; 2. Cooks; 3. Paper-hangers. *Phthisis Pulmonalis.*—1. Editors; 2. Dentists; 3. Architects. *Diseases of Nervous System.*—1. Watchmen; 2. Agents; 3. Innkeepers. *Paralysis.*—1. Agents; 2. Architects; 3. Physicians. *Mental Diseases.*—1. Coppersmiths; 2. Ostlers; 3. Engravers. *Diseases of the Circulatory System.*—1. Liquor Dealers; 2. Coppersmiths; 3. Editors. *Obesity.*—1. Sailmakers; 2. Photographers and Innkeepers. *Diseases of Digestive Apparatus.*—1. Watchmen; 2. Innkeepers; 3. Merchants.

The relative ratio of these diseases to the respective profession is of more or less interest to medical men, as showing the comparative healthfulness of their calling. We name the professions in the order of their ratio of influence upon disease, and in this instance, for the sake of more extended comparison, will give the complete list as presented in the chart.

Chronic Rheumatism.—1. Lawyers; 2. Public Officers; 3. Physicians; 4. Clergymen; 5. Druggists; 6. Dentists; 7. Teachers; 8. Students. Architects, Editors, and Musicians, *nil.* *Syphilis.*—1. Musicians; 2. Architects; 3. Druggists; 4. Public Officers; 5. Physicians; 6. Clergymen; 7. Students; 8. Dentists; 9. Teachers; 10. Lawyers. Editors, *nil.* *Phthisis Pulmonalis.*—1. Editors; 2. Dentists; 3. Architects; 4. Public Officers; 5. Physicians; 6. Teachers; 7. Clergymen; 8. Lawyers; 9. Druggists; 10. Students; 11. Musicians. *Diseases of Nervous System.*—1. Lawyers; 2. Clergymen; 3. Physicians; 4. Druggists; 5. Public Officers; 6. Architects; 7. Teachers; 8. Mu-

sicians; 9. Students; 10. Dentists; 11. Editors, *nil*. *Paralysis.*—1. Architects; 2. Physicians; 3. Lawyers; 4. Teachers; 5. Druggists; 6. Public Officers; 7. Clergymen. Dentists, Editors, Musicians, and Students, *nil*. *Mental Diseases.*—1. Lawyers; 2. Clergymen; 3. Musicians; 4. Physicians; 5. Students; 6. Druggists; 7. Teachers. Architects, Dentists, and Editors, *nil*. *Diseases of Circulation.*—1. Editors; 2. Physicians; 3. Public Officers; 4. Clergymen; 5. Architects; 6. Lawyers; 7. Teachers; 8. Druggists; 9. Dentists; 10. Musicians; 11. Students. *Diseases of the Digestive Apparatus.*—1. Dentists; 2. Physicians; 3. Editors; 4. Public Officers; 5. Clergymen; 6. Druggists; 7. Lawyers; 8. Architects; 9. Teachers; 10. Musicians; 11. Students. *Obesity.*—1. Lawyers; 2. Dentists; 3. Musicians; 4. Students; 5. Clergymen; 6. Physicians; 7. Teachers. Architects, Druggists, Editors, and Public Officers, *nil*.

As we have before remarked, it is impossible, in an ordinary editorial notice, to give even an outline of the valuable deductions contained in these wonderful volumes, but we have striven to perform a conscientious duty in presenting what we have to our readers, in order that they may obtain a faint idea of the immense and incalculable value of this elaborate contribution to the systematic study of the statistics of disease, and their connection with the interesting subject of anthropology. With such a work before the faithful student of statistics, political economy, and public health, it is impossible to say what will be the limit of his studies in the mysteries of the natural laws of development and disease.

In conclusion, we congratulate Col. Baxter on the completion of his arduous labors, and in the name of his profession thank him for the present benefit and prospective good which such labors have conferred upon them.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, May 24, 1876.

DR. C. K. BRIDDON, PRESIDENT, IN THE CHAIR.

RUPTURE OF THE BLADDER.

DR. ERSKINE MASON presented a specimen of rupture of the bladder taken from a man aged thirty-two years, who was admitted into Bellevue Hospital on May 13. On the tenth of May the patient was arrested for intoxication, and was confined in a station-house. Shortly afterwards he complained of inability to pass his water; and, suffering from great pain in consequence, he applied for relief. Instead of obtaining assistance, however, he was deluged with cold water. On the following day he was taken to the City Prison (Tombs), where he remained until his admission to the hospital. While at the prison his water was drawn twice.

When Dr. Mason saw him at the hospital he was perfectly rational; had a small, feeble pulse, anxious countenance, and the abdomen was swollen, the upper portion being tympanitic and the lower portion dull. He complained only of vesical tenesmus. The scrotum was somewhat discolored, giving rise to the possibility of injury of the perineum and consequent rupture of the bladder. No other marks of external injury were, however, discoverable. A moderate-sized catheter was passed into the bladder, and twenty ounces of pure urine were evacuated. There was evidently no stricture. A rectal examination was made by passing the forefinger well up into the rectum, behind the prostate. A little to the left of the latter a distinct swelling was recognized, containing fluid. The diagnosis was then made of rupture of the urethra, behind the triangular ligament, with effusion into the peritoneal cavity.

As the only hope rested in an operation, the usual one for lithotomy was performed. As soon as the incision was made, the finger being passed into the bladder, came in contact with, and passed through, a rent into the posterior wall of the viscus. The latter was firmly contracted, and no urine flowed through the incision. A silver catheter was then passed through the rupture into the peritoneal cavity, and ten ounces of a somewhat turbid fluid were drawn off. The patient sank and died twelve hours after the operation, and on the fourth day from the commencement of the trouble. The autopsy was made a few hours after death, and revealed general peritonitis, with considerable urine in the cavity of the abdomen. The intestines were matted together by recent adhesions. In the posterior wall of the bladder the rent was discovered, measuring one and a half inches in length, the edges being everted, and presenting a sloughy appearance.

In conclusion, Dr. Mason gave the following statistical account of the operations which had been performed for rupture of the bladder:

"The first who did this operation for rupture of the bladder was Dr. W. J. Walker, of Boston, 1845. Operation done 24 hours after the accident; patient recovered.

It was done in this city by Dr. Willard Parker, a few hours after rupture had occurred; patient recovered.

I have had four cases of rupture of the bladder, where I did this operation, and two recoveries.

My first case was in 1871, and reported in the *N. Y. Journal of Medicine*, in a paper on rupture of the bladder, August, 1872.

The first case I had was in 1871. Operation done third day after the accident; patient recovered.

Second case in 1873, a few hours after the accident; patient recovered. Third case was operated on twenty days after the accident; he lived fourteen days. Reported in the MEDICAL RECORD for Dec. 1, 1874. Fourth case, just reported."

I have been able to collect seven cases where this operation has been done, and with four recoveries, a most gratifying result when compared with the seventy-eight cases of rupture of the bladder collected in 1851 by Dr. Stephen Smith, which were treated without operation. Among these there were but five recoveries, and but in one had the rupture opened into the peritoneal cavity, and but in three was the rupture due to violence.

MONTHLY ABORTIONS.

DR. MARY PUTNAM JACOBI presented a small specimen which had been discharged from the uterus of a

married lady during one of her monthly periods. As similar masses, partly resembling clots, and partly resembling membranes, had been voided every month, and as the patient was always regular in her catamenia, she was supposed to be suffering from simple dysmenorrhœa. The passage of the clot, as is usual on such occasions, was always accompanied with pain. The microscopic examination of the specimen in question showed the existence of flat epithelial cells imbedded in a very fine matrix, but none of the cylindrical cells of the uterine cavity were found. The clot was then carefully washed, when the appearance of a very minute blood-stained embryo was seen, with head, neck, extremities, and umbilical cord. The doctor believed that this product of conception had been destroyed by hemorrhage as soon as formed, and thought it by no means impossible that the previous attacks of dysmenorrhœa could be explained in a like manner; in other words, that the patient had been in all probability suffering from monthly abortions.

Dr. Peugnet presented three specimens. The first was the caput coli and appendix vermiformis removed from a young man aged nineteen years. On Monday (May 24) not feeling well he concluded to consult a physician. In his attempt to get into a carriage for that purpose he was seized with syncope, followed by peritonitis and death. At the autopsy the appendix vermiformis was found very much distended with fæces, with a rupture near the cæcum. No enterolites were discovered.

IRREDUCIBLE FEMORAL HERNIA.

Dr. Peugnet presented a second specimen, which was one of irreducible femoral hernia.

On the 22d of December, 1875, the Doctor saw the patient in consultation with Dr. Naudain: a lady, 68 years of age, during her first pregnancy, at 23 years of age, contracted a femoral hernia on right side; this was reduced by her physician and controlled by a triangular pad and bandage, as a truss was irksome. She continued to enjoy good health until about six years since, when she began complaining of intense enteralgia, spasmodic in its character, accompanied with nausea, vomiting, and obstinate constipation; she was seen by several physicians, who made the usual diagnoses in such cases, especially as no evidences of hernia could be found, although carefully searched for. Her enteralgia was controlled by opiates, the constipation only relieved by croton oil, and even this occasionally failed. On the 21st of December, 1875, whilst at stool, a tumor made its appearance in her right femoral region, which led to a recurrence and aggravation of her symptoms. Several attempts were made to reduce the femoral hernia, but without success. The Doctor found the swelling about the size of a hen's egg. As it was evidently distended with serum, an ounce of amber-colored fluid was removed by aspiration; a loop of intestine could then be distinctly felt, but still remained irreducible. Dr. Peugnet then made the usual incision, exposing the sac, and without opening it, divided Hey's ligament and reduced the hernia without difficulty. During the night, the patient had, as she expressed it, "the first natural movement from her bowels in years." On the fifth day there was a recurrence of her pain and nausea with constipation, but these subsided under appropriate treatment. On the 11th day she insisted upon rising for stool, immediately sank into collapse, and died in twelve hours. At the post-mortem, 24 hours after death, the most extensive diffuse suppurative peritonitis was found, although there had not been the slightest indication of it previous to her death. A diverticulum of the ileum was found protruding through the right femoral ring adherent to the sac, and firm and old adhesions were also found at the neck; immediately above, the ileum was twisted, and the entire small intestine above the twist distended with fæcal matter. It was evident that the hernia reduced by the operation was a recent enterocele, and that the adherent intestine served to explain the causation of the severe and obscure gastro-intestinal disorders this patient had been subject to at intervals for several years previously.

OVARIOTOMY.

A third specimen by Dr. Peugnet was an ovarian cyst, with the following history:—

Mrs. H., æt. 70 years 9 months, a multipara, had always enjoyed good health until January, 1875, when she felt a sensation of discomfort and uneasiness in the lower portion of the abdomen; but did not observe any appreciable enlargement until the ensuing April; then sought medical advice, and was treated with diuretics. Subsequently she passed into the hands of a homœopath, who pronounced it a uterine fibroid and treated her for inflammation of the bowels in consequence thereof, and pronounced her case as incurable. Dr. Naudain was finally called in, and recognized the difficulty.

On the 11th of March, 1876, Dr. Peugnet saw her in consultation with Drs. Naudain and the late C. F. Rodenstein. The abdomen was much enlarged and the physical signs of an ovarian cyst unmistakable. With a view to relieve her from the pain and distress caused by the pressure, as well as to prepare her for ovariotomy, the Doctor tapped the cyst, and removed from it twelve pounds of a clear albuminous fluid. The uterus, which was turned towards the right iliac region, and partially anteverted, immediately resumed its natural position; no evidences of adhesions were found, and there were apparently some solid constituents in the cyst which evidently arose from the left side. On the 15th of March the patient was taken with symptoms of peritonitis, which, at first alarming, rapidly subsided under the use of opiates. Owing to her advanced age, she was advised that ovariotomy was scarcely warrantable, but insisted upon submitting to it rather than to suffer a year or two longer. With this view, quinine, muriated tincture of iron, with minute doses of the bichloride of mercury, were administered to her, the latter with the special purpose of increasing the red corpuscles of the blood, as she was rather anæmic.

On the 3d of May, the patient having been etherized by Dr. A. M. Campbell, Dr. Peugnet, with the advice and assistance of Dr. Sims, and in the presence of Drs. Naudain and Crump, performed the usual suprapubic operation. There was a slight effusion of serum in the peritoneal cavity, a few adhesions on the left anterior surface, which were readily separated with the fingers, the cyst evacuated with the dome trocar, and readily extracted, the pedicle secured with wire clamp, and a rubber drainage tube passed through Douglas's cul-de-sac. This tube had been prepared by Dr. Sims, and was constricted at its centre by means of a silver ligature, for the purpose of permitting of a more thorough washing out of the peritoneal cavity, the injection passing in from above, and the drainage portion proper carrying it off from below. For the purpose of insuring perfect drainage, the straight portion of a silver catheter, of sufficient length to reach the bottom of the pelvic cavity, was passed into the upper extremity of the tube. One of the adhesions was tied with a silk ligature, and the latter cut close. The wound closed with twelve silver sutures, all passing through the peritoneum. The cyst and contents

weighed over twenty pounds. One hour and fifty minutes, including anæsthesia and dressing the patient, was consumed in the operation. Pulse 106, temperature 98° in axilla, immediately before the operation. Drainage in first twenty-four hours, two ounces of bloody serum, none subsequently. The pulse never rose above ninety-eight, temperature 99⅘ in mouth. On the 5th, or second day, there was slight tympanites and tenderness, which entirely subsided on the 7th, or fourth day. Ten sutures were removed on the 10th, also the silver tube. On the 11th, or eleventh day, the drainage tube was removed; 19th, or sixteenth day, the pedicle came away; 20th, an enema, followed by an evacuation; 24th, or twenty-first day, patient sitting up, a small superficial ulcer at lower segment of wound.

The special points of interest in this case, are, 1st, one of the oldest recorded; 2d, the rapidity of the development of the cyst, which is multilocular, but only one having attained any size.

TRACHEOTOMY IN DIPHTHERIA, IN A BOY TWO YEARS ELEVEN MONTHS, WITH RECOVERY.

Dr. Charles A. Leale presented two pieces of diphtheritic membrane, each over two inches in length, which he had removed from the opening in the trachea, on March 22, 1876. The child had adenitis, œdematous face and neck, was cyanotic, and suffocating from the accumulations of exudations in the larynx and trachea, when Dr. Leale made an opening as low as the upper border of the manubrium, while the child was additionally rendered insensible by sulphuric ether. No vomiting followed, no blood-vessels were ligated, and only about ʒ ij. of hemorrhage lost from the capillaries. It was nearly an hour before the tube could be safely inserted, in consequence of the large accumulation of muco-purulent matter and diphtheritic membrane, which he removed by the long elbow forceps inserted through the wound, and while the child was held with head lower than body to facilitate the removal of matter, by sponging the parts immediately after an expiration, and before it could be drawn in by returning inspiration. In two hours after the operation the child breathed comfortably, and the skin was less cyanotic; he was placed on his side, and inhaled steam; and Dr. J. Lewis Smith in consultation saw him. At 12 P.M. Dr. Leale examined a piece of the freshly thrown off membrane, and found it alive with cocco-bacteria. First day after operation, child breathed easily through the tube; the inner one removed every half hour to be cleansed—it frequently containing large pieces of the diphtheritic membrane. During a forcible paroxysm of coughing, a piece was thrown through tube a distance of ten feet. Second day, pulse 120, R. 35, no air could pass through the larynx, and the endeavor increased the painful breathing to an alarming degree. Third day, P. 135, R. 35, T. 105°; profuse expectoration through tube, and frequently clots of blood. Urine examined within quarter of an hour after being voided, contained ½ albumen, epithelial casts, and an abundance of living bacteria. Seven P.M. P. 144, R. 62, T. 106°, increased evidences of septic poisoning. Nine P.M., P. 135, R. 60, T. 105°; erosions around wound, and from pressure of tube, caused 1 oz. hemorrhage; and, in consequence, the tube was permanently removed; has very painful cough and profuse expectoration of thick diphtheritic membrane from the small bronchial tubes.

4th day: P. 150, R. 60, T. 105°; entire surface of body covered with herpes, profuse diarrhœa, very light in color, and containing large quantities of mucous and diphtheritic membrane, showing that the disease had extended to the stomach.

5th day: P. 130, R. 28, T. 102⅘°; wound in neck covered with diphtheritic exudation, which reforms as soon as removed by suppuration.

6th day: P. 140, R. 62, T. 105⅗°; cannot breathe through the larynx; two small deep seated abscesses opened beneath the fascia at wound, discharging about ½ oz. pus; child exceeding fretful; passage of air over denuded bronchial membrane very painful; parts cleaned by frequent sponging after expirations, wound contracting, and child becoming cyanotic in consequence. With the elbow-forceps passed a small piece of sponge rapidly two inches through the opening, at moment of inspiration, and with forceps dilated the tracheal opening with beneficial effect; and concluded, if no improvement followed, to reinsert the tube.

7th day, by cleansing the wound to keep it open, and with partial removal of occlusions above, by coughing, could breathe better. There is complete aphonia.

From 7th to 11th day after the operation, the pulse, temperature, and respirations at many times were alarming; and apparent death impending. After the 11th day, convalescence fairly commenced and rapidly progressed until April 13th, twenty two days after the operation, when he went to Dr. Leale's office. The opening had then completely closed, and the voice was almost entirely restored. His treatment from time of operation until recovery was without any medicine. Diet of milk, bread and water, and the inhalation of steam in a room, the temperature of which was kept at 98° Fah.

Dr. Mary Putnam-Jacobi, in referring to the successful result of the operation in so young a child, asked the question if there were any similar cases on record of children under one year of age.

Dr. Beverley Robinson answered that Dr. J. Solis Cohen, in his late work "*On Croup* and its Relations to Tracheotomy," had reported several of such cases.

Dr. Robinson has since then sent the Secretary the following statistics from the work referred to:—

Age at Operation.	Operator.
6 weeks	Scoutetten (Strasbourg), 1840.
7 months	Bell (Edinburgh), 1861.
7 months	Lawson Tait (Birmingham).
10 months	Baizeau (Algiers).
10 months	Dujardin.
10 months	Bourdillat.
10 months	J. Cooper Forster.

The details of the first of the above cases (which are very remarkable), will be found in the *Am. Jour. Med. Sciences*, April, 1844, p. 466.

Dr. Mason thought that the elbow-forceps spoken of by Dr. Leale was an invaluable instrument for the removal of phlegm from the trachea, and he was satisfied that he had by its use saved more than one child's life. The sudden plugging of the tube was an accident of such frequency, and so often resulted in death before the physician could be summoned, that his experience had almost persuaded him not to use a tube at all, but merely to make a free incision, keeping the lips of the wound open by strings passed behind the neck. The objection to the old form of tube was that, by unequal pressure at its curve, it produced ulceration.

Dr. Robinson thought that this complication could be avoided by use of the tube bent at right angles.

In answer to a question regarding the laying open of the tracheal wound, Dr. Mason stated that such an operation had been performed abroad.

Dr. Bridson added his testimony to the great value of the elbow-forceps in the prompt and efficient removal of clogging phlegm in the trachea, and referred to some cases in which it had proved the only means

of saving life. In one instance of tracheotomy for syphilitic disease of the larynx he was in the habit of cleaning out the trachea regularly with this instrument, sometimes inserting it as far down as the bifurcation, which latter, on more than one occasion, was grasped between the blades. In order to guard against the possibility of plugging of canula, he had made it a rule to have the inner tube removed every hour, washed and immersed in glycerine before it was reinserted. In regard to the propriety of the operation he had not the slightest doubt, and believed that it was not performed as often as it should be. He was of the opinion that the use of anæsthesia during the operation would explain a good many fatal results.

Dr. Mason, in connection with the danger of sudden clogging of the tube, referred to a case of his in which tracheotomy was performed as a forlorn hope, and in which at the moment of its completion a plug of mucus was coughed into the tube, completely closing it and causing immediate death.

Dr. Biddon presented the ankle-joint removed by amputation of the leg from a male patient of the Presbyterian Hospital. He then read the following history of the case as prepared by Dr. W. E. Forest, a member of the House Staff:

Terrence Reynolds, age 34, admitted February 23d. Three months ago the patient was pushed backward off a step, striking on the left foot and falling to the ground. Admitted to the hospital next day for fracture of the leg. The patient is a large man, of intemperate habits. Had syphilis fifteen years ago, followed by secondary and tertiary manifestations.

On examination the tibia was found to be fractured near the ankle, obliquely downwards and forward into the joint. The fibula fractured at the lower extremity as in Pott's fracture. The soft parts presented no appearance of injury except *a small superficial abrasion*, so small as almost to escape detection, opposite the lower end of the tibia. The syphilitic cachexia of patient was strongly marked, the integument over the tibia on the uninjured limb being purplish and scaly, and deformed by ostitis and periostitis.

Three days after admission the limb was put up in a plaster dressing. In a few days this was removed, when the small abrasion at the anterior and inner side of the ankle was found to have assumed the circular, worm-eaten appearance of a syphilitic ulcer. The plaster dressing was reapplied, a fenestra being cut in the dressing opposite the ulcer, and the patient put upon anti-syphilitic treatment.

From this time, March 1st, the ulcer steadily progressed, in spite of treatment, until it became nearly an inch in diameter, of a circular, perforating character.

March 27th.—The patient had a severe chill, followed by some prostration, during the past night. The discharge to-day is greater in amount, and movement of the foot forces out a thin, sanious pus. The chill, together with the character and manner of the discharge, indicates, it is thought, that the joint is penetrated.

March 29th.—The probe passes into the joint and comes in contact with carious bone. A small detached fragment of necrosed bone from the lower end of the tibia was removed. The surface of the ulcer has assumed a diphtheritic appearance.

April 2d.—An incision made in front of the external malleolus allowed a free discharge of pus. From this time on the discharge continued from both the openings into the joint; the lateral motion of the foot became more and more marked, and crepitus on movement of the foot was distinct; water injected into one opening passed freely through the joint and out at the other opening. Thus a simple abrasion of the skin had become a penetrating ulcer of the ankle-joint, due to the syphilitic cachexia of the patient.

May 5th.—The condition of the joint has not greatly changed. The blackened and necrosed end of the tibia is visible through the inner opening, and caries of the astragalus can be detected by manipulation. The integument of the whole lower third of the leg has assumed an unhealthy, brawny, inflamed appearance.

May 11th.—Amputation having been decided upon, the operation was made at the junction of the upper and middle thirds of the leg, by the lateral skin flaps and circular through the muscles. A small quantity of blood was lost and the patient made an excellent recovery from the immediate effects of the operation. The examination of the amputated part showed the periosteum covering the lower end of tibia to be thickened and inflamed. The posterior half of the articular surface of the bone was split off, together with the posterior two inches of the lower end of the bone. The anterior portion of the articular surface and the anterior portion of the bone at its lower end was dead and blackened, but no well-marked line of demarcation had formed. The posterior portion of the lower end of fibula fractured off and displaced. The astragalus was extensively ulcerated and eroded on its upper surface. The remaining bones of the foot healthy.

Correspondence.

THE THEORY OF ANIMAL HEAT.

To the Editor of The Medical Record.

Sir:—Allow me to intrude upon your space in order to speak of some theories advanced by Dr. Gray, of West Meriden, Conn., in his article on "Animal Heat, and its Reduction by the use of Gelsemium."

I shall not at all refer to his discovery of the febrifuge quality of the herb spoken of, although I am quite a sceptic from the experience I have had. For in my own experience, as well as in that of several colleagues, I have seen the much-vaunted febrifuges, such as quinia, salicylic acid, as well as salicylate of soda, prove utterly unable to control a high febrile state in many cases. In others their administration has been followed by a reduction—in some cases a marked one—and there the golden rule, "*Post hoc ergo propter hoc*," has, of course, been applied.

Notwithstanding, I shall try the gelsemium as faithfully as I have tried the others, and I am really sorry that for that reason Dr. Gray's paper has come only now to my notice.

The only reliable and never-failing method has been, at my hands, that of Ziemssen—lukewarm baths, gradually reduced to a cold temperature. In pneumonia, of children especially, if combined with one or two doses of quinine—given more as a tonic than as a febrifuge—they are invaluable.

Be that as it may, however, the point I wish to make is one that has a wider application: I propose to speak of Dr. Gray's "*full and rational theory of heat*," which he gives in the following words:

"An increase or diminution of the activity of the vital functions is accompanied by a corresponding rise or fall of the temperature of the body."

I shall not ask Dr. Gray how he reconciles that clini-

cally so important variety of fever, called asthenic, with this theory, or whether he recognizes such a type at all; I only wish to direct his attention to the term vital functions.

This term, as well as vital force, ought to be entirely discarded. In modern physiology the principal effort has been directed toward showing that in the animal, as well as in the vegetable kingdom, the same physical and chemical forces are the active agents; and although force, as well as motion, may take different forms, there is one and the same impulse underlying them all. Force is the cause of motion, and motion is the cause of force; potential energy may, in various ways, be stored up and transformed into actual energy, and a given amount of the one will always correspond to a definite amount of the other. This theory of the correlation of forces applies to vital, so-called, as well as to physical or chemical forces. And the explanation of the process by which animal heat and muscular power is developed is the following:

In the leaf of the plant, which is the chemical laboratory in the earth's household, the granules of chlorophyll have the innate property of deoxidizing carbonic acid under the influence of the sun's light (the yellow rays particularly). The process takes place in presence of various inorganic bodies, such as water, ammonia, sodium, and potassium salts, sulphuric and phosphoric acids. These may enter in combination with some of the reduced carbonic acid atoms and form various albuminous bodies; or, if water alone enters, or its constituents, hydrocarbons and carbohydrates will result. Only a comparatively small part of these compounds is used up for the tissue-change of the living plant, undergoing oxidation and leaving it again in the form of carbonic acid. The greater part remains and serves as nutriment to animals, in whose bodies it is oxidized and nearly all of it reconverted into carbonic acid and water; only a small part of the nitrogenous compounds is not completely oxidized and leaves the system as urea, and is then transformed into a carbonate of ammonia, ready again to begin its cycle.

The principle of the correlation of forces teaches that every particle of the force developed by the sun's light in deoxidizing the CO_2 in the chlorophyll-granules of the leaf is deposited as actual energy in the carbon-compounds resulting from this process. This potential energy is converted into actual energy as soon as the carbon contained in those vegetable matters is brought to its highest degree of oxidation, *i.e.*, is burnt up to CO_2. The actual energy thus produced by chemical action may directly take the form of molecular motion, of heat, or a part of it may be converted into mechanical motion by the intermediary stage of muscular contraction.

Vital action, therefore, means nothing but *chemical action*, however modified by the circumstances under which it takes place. Animal heat has its source in nothing but in chemical action; however modified the oxidation, however numerous the intermediary stages (Gorup-Besanez mentions about ten of the latter), it is *oxidation*, and nothing but *oxidation*.

The explanation of animal heat by "friction and vital force" is utterly untenable in the light of modern physiology, and besides it is not even the only theory held by physiologists of the seventeenth century, as Dr. G. stated; for there lived during that time a physician in Bath, England, by the name of John Mahew, whose views, as published in his works, in 1683 (two years after his death), very nearly conform with the principles heretofore stated, which are accepted by all the great physiologists of the day.

If friction is really to take part in the production of animal heat (and to a very limited degree it does), we may well ask, What is the cause of the friction? The answer is the expulsive force of the heart. And the cause of this force? The contraction of the heart-muscle. And of this? Well, nothing but the oxidation of the constituent muscular tissue and muscle plasma. Therefore *oxidation* again is the *ultimate* and the *only* cause of animal heat. And this same oxidation that is the cause of the tissue-change, gives, to my mind, a much more rational explanation why the blood in the veins is warmer than in the arteries, especially that of the portal vein, which collects the blood from the most extensive mucous membrane of the body, where, naturally, absorption and chemical action is at its height. It is hardly probable that the impelling force of the heart should be of such magnitude as to produce an elevation of the temperature of the blood by friction, amounting to ½ to 2 degrees. On the contrary, as Fick has shown, the mechanical work of the heart in 24 hours is equal to 40,000 kilogrammometers, which is equal to about 100 units of heat, *i.e.*, the force of the heart, if entirely converted into heat, would be able to raise the temperature of 100 kilos of water by 1° C. (=1¾° F.). Assuming the amount of blood in a man to be 9 kilos, and his pulse to beat 60 in a minute, a simple calculation will determine the elevation of temperature for every beat:

$$\frac{9 \times \qquad \times 100}{5 \times 24 \times 60 \times 60 \times 9} = 0.0000231 \text{ F.},$$

and not from ½° to 2°, as Dr. Gray's theory assumes.

Friction and *vital functions* ought therefore to be put aside, and *oxidation* take its place.

Yours truly,

GEO. W. RACHEL, M.D.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from July 9th to July 15th, 1876.

COUES, E., Asst. Surgeon. To report to Secretary of the Interior for duty with the U. S. Geological and Geographical Surveys of the Territories, under charge of F. V. Hayden, U. S. Geologist. S. O. 134, A. G. O., July 3, 1876.

KNICKERBOCKER, B., Asst. Surgeon. His resignation accepted by the President, to take effect July 1, 1876. S. O. 134, c. s., A. G. O.

CLEMENTS, B. A., Surgeon. Assigned to duty as Post Surgeon at Fort Sanders, Wy. T. S. O. 92, Department of the Platte, July 7, 1876.

TILTON, H. R., Assist. Surgeon. On completion of examination for promotion, to proceed to Headquarters, Department of Dakota, and report to the Medical Director of that Department. S. O. 138, A. G. O., July 10, 1876.

KINSMAN, J. H., Assist. Surgeon. When relieved by Dr. Terry, to proceed without delay from Fort Ripley, Minn., to Fort A. Lincoln, D. T., for temporary duty at that post. S. O. 83, Department of Dakota, July 12, 1876.

CALDWELL, D. G., Assist. Surgeon. Leave of absence extended two months. S. O. 137, A. G. O., July 8, 1876.

BENTLEY, E., Assist. Surgeon. Granted leave of absence for six months. S. O. 137, c. s., A. G. O.

KIMBALL, J. P., Assist. Surgeon. To accompany battalion of Twenty-second Infantry from Forts Brady

and Mackinac to Fort A. Lincoln, D. T., for duty under General Terry. S. O. 127, Military Division of the Atlantic, July 9, 1876.

King, J. H. T., Assist. Surgeon. Assigned to duty as Post Surgeon at Fort Concho, Texas. S. O. 121, Department of Texas, June 30, 1876.

Harvey, Phil. F., Assist. Surgeon. To accompany battalion of Twenty-second Infantry, under command of Lieut. Col. Otis, to Fort A. Lincoln, D. T., for duty under General Terry. S. O. 127, c. s., Military Division of the Atlantic.

Dickson, J. M., Assist. Surgeon. Granted leave of absence for one month from September 1st. S. O. 129, Department of the Gulf, July 8, 1876.

Tesson, L. S., Assist. Surgeon. To accompany battalion Fifth Infantry, under command of Col. Miles, to Department of Dakota. S. O. 139, Department of the Missouri, July 8, 1876.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending July 15, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
July 8.....	0	5	29	1	37	53	8
July 15.....	0	10	21	3	14	31	12

The following is a record of cases of contagious disease reported at this Bureau for the quarter ending June 30th, 1876:

Number of cases of typhus fever, 3; Typhoid fever, 89; Scarlet fever, 876; Cerebro-spinal meningitis, 39; Measles, 612; Diphtheria, 934; Small-pox, 285.

Practice of Medicine in France.—No medical man can practise in France without a license, which costs several hundred francs yearly; neither dare he write a medical certificate or similar legal document except on paper bearing the government stamp.

Sir William Fergusson's condition has undergone no material change within the last fortnight.

Cholera is now raging in Cashmere.

The Plague.—At Bagdad the daily average of cases is eighty and that of deaths sixty.

The meetings of Medical Societies in New York have adjourned until September.

The death of the Sultan is now admitted to be the result of suicide committed in a moment of desperation by opening the arteries of both arms by a pair of scissors.

British Medical Service.—Owing to the growing deficiency of medical officers in the British Army, it is stated that leave of absence in several of the home districts has been peremptorily stopped, and that at Woolwich every medical officer has extra duties imposed upon him. So much for the new army warrant.

Examination by Proxy.—A medical student, named Dearden, has been lately apprehended on the charge of defrauding the Board of Examiners of Glasgow University, by employing another man to represent him at the preliminary examination.

Annual Report of the Marshall Infirmary, Troy.—The following is a summary of the operations of the hospital for the year ending August 2d, 1875: Total number of patients remaining under treatment at the close of the year was 45—males, 30; females, 15. The number of patients admitted during the year was 235—males, 168; females, 67. Total number of patients under treatment during the year was 280—males, 198; females, 82. Of this number there were cured 146—males, 109; females, 37: improved, 40; males, 29; females, 11: unimproved, 19—males, 9; females, 10: dead, 19—males, 12; females, 7. Total number discharged during the year was 231—males, 163; females, 68. The number of patients remaining under treatment at the close of the year was 49—males, 35; females, 14.

In Commemoration of Traube.—At a late meeting of the Berlin Medical Society it was decided to hold a special meeting to do honor to the memory of Traube.

Death of Prof. Richter.—On the 24th of May, Prof. Hermann Eberhard Richter, known wherever medicine is read in the German language as editor of *Schmidt's Jahrbücher*, died in Dresden, at the age of sixty-eight. Widely and well known as he was in this position, he was also most favorably known in Germany as founder and editor of the organ of the German Medical Union. His efforts to promote union among physicians and to advance their standing were unwearied, and the profession in Germany feels largely indebted to him for procuring governmental recognition and appreciation of the medical associations. He also took great interest in sanitary science and the development of sanitary legislation. He published several works on various medical topics.

Five Children at a Birth.—The *Melbourne Medical Record* reports the case of the wife of a native who at one birth created a family of five children, three sons and two daughters.

Dissection is now legalized in Australia.

Midwifery Engagements.—In England a medical man can claim by law an obstetric fee if previously engaged to attend a case, even if the birth takes place in his absence.

Female Doctors.—Within the last ten years the University of Zurich has conferred the diploma of Doctor of Medicine on thirteen ladies.

Vivisection in England.—The Council of the Royal College of Surgeons of England has expressed the opinion that legislation on the vivisection question is unnecessary and subversive of the interests of science.

The *New York Medical Register* for the ensuing year (Dr. A. E. M. Purdy, editor) is published, and presents, typographically speaking, an elegant appearance. It contains the names of 3,805 physicians, divided as follows: in New York City and county, 1,190; Brooklyn and Kings county, 380; the remainder of New York State, alphabetically arranged, 1,267; in New Jersey, 589; and in Connecticut, 379. The number of removals in this city during the past year have been 168; new names added, 89. The removals in Brooklyn were 70, and the new names 26. As a whole, the work fully sustains its well-earned reputation for completeness and accuracy.

British Medical Association.—The next annual meeting of this Association will be held at Sheffield, commencing August 1.

Original Communications.

THE RELATION OF LOCOMOTOR ATAXIA TO GENERAL PARALYSIS OF THE INSANE.*

By ALLAN McLANE HAMILTON, M.D.,

VISITING PHYSICIAN TO THE EPILEPTIC AND PARALYTIC HOSPITAL, NEW YORK, ETC.

I DESIRE to invite attention to the subject of sclerosis of the posterior columns of the cord, and its coexistence more particularly with that form of insanity known as general paralysis of the insane. Not only do these two conditions occur together more frequently than they are generally supposed to, but the former very often presents the most varied mental expressions, passing from simply irritability to marked dementia.

Leidesdorf† has related one case in which general paralysis was preceded by spinal symptoms, and Maudsley speaks of other cases. Calmiel says that in many cases the changes proceed from the cord upwards, and Baillarger endorses the views of the last-mentioned authority. From a consideration of the fact that sclerosis is nearly always progressive, and that locomotor ataxia is in many instances ascending, it is very probable that either an extension upwards of the morbid process, in such a way as not to involve the roots of the intercostal nerves, or, on the other hand, a simultaneous and general appearance of disseminated sclerosis in the cerebrum and cord, will very probably be attended by mental disturbance. In most of the autopsies that have been made, decided changes have been witnessed in the layers of the cortex; we may therefore assume that a lesion in the gray cortical matter may be attended by intellectual perversion. Charcot has proved very conclusively, by the classical case of Mlle. V., that disseminated sclerosis can exhibit all the symptoms of general paralysis of the insane; that intellectual trouble, even including the delusions of wealth, or, as Valentenir calls them, the *délire des grandeurs*, may occur in patients of this class‡

We find also that in these people there is often a great deal of emotional disturbance. Every one who has seen much of locomotor ataxia will recognize the melancholic attacks, or the great excitability. I have a patient in whom the spinal sclerosis has extended so high as to greatly affect the origin of the intercostal nerves; and in her, transitory attacks of mania are not at all uncommon. She becomes violent, hurls abuse at those around her, and talks only in French; her chosen language at ordinary times being the English. Charcot relates that Mlle. V. was subject to true attacks of lypomania, and had hallucinations of hearing and vision. She had delusions that those about her intended her death by poison. For twenty days she refused food, and it was found necessary to use the feeding tube.

With these things in mind, it is very reasonable to conclude that general paralysis is but the expression of disordered function produced by the same lesion that causes decided pelvic trouble and locomotory perversion, when it is seated in the cord. The form of morbid alteration of the brain and its meninges, I think, has very little to do with the formation of any particular variety of insanity; that it is a matter of location rather than of alteration. In any of the lists of morbid appearances we will find all forms of altered structure,—meninges, gray and white substance,—are involved, and we do not find any two forms of insanity which present identical appearances. If you will consult Fox, which is the most complete work I know of, you will see that there is a great deal of confusion and irregularity of information that may be obtained from the examination of the insane brain.

Perhaps the morbid anatomy of general paralysis of the insane is more clearly settled than all the rest. Delaye, Foville, and Pinel (Grand-Champs) found induration of the cerebral substance; Fox presents a plate illustrating the miliary sclerosis of general paralytics, and I myself have seen the same changes on isolated spots, varying in size from a small speck to the larger spots of colloid degeneration. That these appearances are the result of primary ischæmic trouble there is not much doubt. Fox is of the opinion that a prolonged spasm of the vessels, and subsequent condition of degeneration, are the precursors of actual increase of the connective tissue. In the cord, clinical experience teaches us that conditions of altered vascularity precede sclerosis in every instance, and that marked functional changes are the forerunners of locomotor ataxia. In the brain the primary alteration of function, however slight, may be connected with decided interference with the intellectual processes, and sometimes when these patients die before the disease has extended, it will be exceedingly difficult to detect any alterations, either gross or microscopical, while in the cord, if ataxic symptoms have developed themselves, in nine tenths of the cases there will be seen unmistakable traces of induration.

Notwithstanding so many observers consider the lesions in general paralysis to be those of sclerosis, Calmiel, Poincaire, and Bonnet thought that they were more often softening, and fatty degeneration; in fact, others take equally opposite views, but the great majority hold to the other doctrine. With the anatomico-pathological facts in mind, it is strange that the true conditions are not more frequently seen together. In my own limited experience I have seen several cases which presented an extension of the symptoms.

Obersteiner,* in an excellent paper upon Locomotor Ataxia and Mental Disease, considers that mental symptoms are found in the greater proportion of cases of this disease, and calls attention to the fact that these expressions of psychical trouble may be very slight, but still an acute observer will know that there is a departure from the normal intellectual condition. The patient's character is often changed very markedly. I have been often astonished at the apathy of the individual, or, on the other hand, the irritability of temper, the violence of anger, the petulance, which are more than transitory evidences—they are as important symptoms, I think, as neuralgic pains, difficulty of coördination etc. These changes were very well displayed in a patient of my own: in health a most amiable, high-minded army officer; in disease a morbid, bad-tempered, whining wreck. He had been noted for his gallantry on the field during the war; but after this disease had become once established, his character seemed to undergo a complete transformation. He wrangled with every one; became irritable over petty things, and made himself generally disagreeable.

Obersteiner† and Simon‡ both agree that these

* Read before the New York County Medical Society, June 26th, 1876.

† Beitrag zur Diagnostik der Geisteskrankheiten, von der M. Leidesdorf.

‡ Leçons sur les Maladies du Système Nerveux, p. 200.

* Wiener Medizinische Woch., No. 29, 1875.

† Loc. cit.

‡ Archiv für Psychiatrie, I. & II., 1875.

patients should be examined most carefully, and that the prognosis depends much upon the facts relative to mental alterations. The latter says: "It is not enough that the patient keeps himself quiet, and answers the questions relative to his age, how he feels, etc., and does not show marked delusions;" these are not enough to assure us that his intellect is intact.

In regard to the grave secondary mental changes, Tigges* considers general paralysis to be a complication, while Oberstiener is convinced the symptoms of this latter disease indicate a progression of the sclerosis upwards. He considers the lesions to be identical, and that it is only the seat of the change which has anything to do with the form of symptom expressed. He has also found in general paralytics who have died, a sclerosis of the cords.

The commencement of paralysis of the insane is not regular. We may either have the mental symptoms preceding the paralytic, or *vice versa*, or they may both show themselves simultaneously after a form of apoplectic attack.

M. Rey, whom I have alluded to, has observed nine cases of insanity associated with locomotor ataxia. In three of these the spinal sclerosis preceded the cerebral trouble, and in one the induration had extended from the posterior to the lateral columns. He found that the diagnostic difference between locomotor ataxia combined with cerebral induration and simple descending general paralysis of the insane, was the walk. In the former the patient could not stand with his eyes shut, and in the latter there was no difficulty of the kind. We may also take for granted that the walk of the ataxic is an early sympton, and that of the general paralytic a late one. Both are examples of defective coördination, and I think the latter is very unwisely called *paralytic*. I have found in these patients (the general paralytics) *festination*, which Sanford considers to be confined to paralysis agitans, and is an evidence more of sclerosis than anything else.

The difficulty of turning around is marked in ataxis, and I think is not a prominent symptom in general paralysis.

Though Sankey has presented us with a table showing the points of difference of the two diseases, I think it wise to give one that is more extended. Some of these symptoms will be found to very closely resemble each other, and I am assured will show how possible it is for the two diseases to run into each other.

GENERAL PARALYSIS.	LOCOMOTOR ATAXIA.
Initial Mental Symptoms.	
Slight irritability of temper. Extravagance (the patient purchases unnecessary articles, or spends money without reference to his means).	No mental trouble, except perhaps irritability.
Erotic and libidinous idēas and indulgences.	At first diminished sexual power, afterwards an increase.
Initial Material Symptoms.	
Slight impairment of muscles about mouth, and tremor of tongue (when protruded it is agitated by vermicular tremors).	No affection of tongue, nor of any muscles of face, except those supplied by third nerve.
Pupils unequal.	Pupils generally contracted, sometimes dilated after an attack of pain. Strabismus a frequent symptom.
Patient unable to properly pronounce his words; his speech is thick and very slow (Ronquin); stammering (Griesinger).	No disturbance of speech.
Patient begins to lose power in both upper and lower extremities; he does not raise his feet; walk somewhat straggling; feet planted rather widely apart. Patient inclined to walk a great deal.	Gait jerky; patient comes down on heels, feet thrown out with force. Patient unable to walk in dark.
Patient can stand with eyes closed.	Patient cannot stand with eyes closed.
Difficulty of coördination of upper extremities generally primary.	Difficulty of coördination of muscles of upper extremities always secondary.
Patient cannot perform delicate muscular acts, particularly writing. He leaves off the ends of words or omits the word altogether—(early stages).	Patient cannot perform delicate acts with muscles of upper extremities—(late stages).
Patient boastful, irritable; has delusion of great wealth; violent; will not bear contradiction.	Patient may have moral perversion; in last stages there may be mania. Attacks of melancholia not uncommon during progress of the disease.
Occasionally local paralysis, generally on one side.	Never paralysis.
Tremors in limbs.	Tremors only occasional.
General loss of electro-muscular contractility in late stages (Bucknil).	Exaggerated electro-muscular contractility in the beginning, loss later on.
Very slight muscular atrophy (Marcé, Brierre de Boismont).	Very slight atrophy of muscles of lower extremities, more from disuse than anything else.
Diminution of reflex excitability.	Diminution of reflex excitability; loss of muscular sense.
The progress of the disease in general is from above downward (Calmiel).	Progress from below upward.
Disturbances of sensation are sometimes primary. There is sometimes hyperæsthesia.	Disturbance of sensation are always primary; generally cutaneous anæsthesia at some time.
Generally runs its course in a few years.	Of much longer duration.
There may be periods of remission.	Disease progressive.
No marked involvement of bladder or rectum till the end.	Generally obstinate constipation; sometimes paralysis of both sphincters.
Usually terminates in dementia.	No mental decay as a rule. Patient dies of phthisis.
During the progress of the disease there may be paralysis of various cranial nerves.	Not uncommonly the fifth, sixth, third, and optic nerves may be affected.

From an inspection of this table, it will be evident that there is a close similarity between the symptoms of the two diseases, which I think may be explained by the difference of location. In both defective coördination is marked. In both reflex action is lost. In both there may be tremor. In one the disease is an evidence of lesions in the cortex, in the other in the white or gray matter of the cord. Both may be seen in the same individual, and after death the lesions

* Allgemeine Zeitschrift für Psychiatrie, 1871.

are the same. The mental symptoms may be identical, although always differing in the period of appearance. Ocular difficulties may be present in either, as may difficulties in speech. Both are progressive and generally fatal.

It now remains for me to relate a case which lately came under my charge where the sclerosis of the cord was ascending, and in an incredibly short space of time the cerebral symptoms which indicate the general paralysis of the insane were evident.

M. F., aged twenty-nine, United States. On admission to the Epileptic and Paralytic Hospital, March 6, 1876, I was immediately struck by the woman's walk, which was ataxic in the extreme, and on questioning her and her husband we ascertained that about two years ago she had neuralgic pains in the legs and feet; her walking became defective, and has continued so. Her mind has been clear up to a short time ago. Her pupils are now unequally dilated, the left being the largest. Her lips quiver distinctly, and her tongue, when protruded, also quivers. When told to keep it quiet the motion is greatly exaggerated. There is some ptosis of the left eye. When told to close her eyes she is unable to coördinate delicate muscular movements. She cannot find the tip of her nose with her forefinger by more than an inch. When her eyes are open she cannot touch small points, such as the markings upon my watch-dial. When she stands with her eyes closed she topples over almost instantly. When she walks her toes are thrown out, and she comes down upon her heel. Her feet are planted far apart when she attempts to stand. When walking across the room she reels, and has difficulty in turning around. When attempting to answer questions she talks slowly, each word being uttered with some effort; the words containing the letters "f" and "p" are *explosive*, and the lips seem to have a great deal of work to form them. The consonants are slurred over; for instance, the word "man" is pronounced "mah," the "l's" are dropped, as are many other letters. Her writing is very scratchy and irregular, although her husband says she wrote an excellent hand. Mentally she is silly, and laughs immoderately at wrong times and without cause. She has no idea of time, but seems to know what she is saying. She has had several delusions, one of which was that she had been home the day before.

May 12th; two months after admission.—Her walk is much worse; no urinary or other difficulty. There is some festination; pupils still uneven. The difficulty in speech has markedly increased. Her tottering walk is very striking. We at first thought she had syphilis, but this is not so. Being unmanageable and restless, she was transferred. Here undoubtedly was an ascending condition, beginning with the pains and gait of locomotor ataxia, and ending with several early symptoms of general paralysis.

A case related by Obersteiner* illustrates another phase of this connection of symptoms of both diseases in one patient. There was undoubtedly a predisposition to mental trouble. It is to be regretted that a *post-mortem* examination was not made, for the case was a most interesting one.

M. D., banker, Vienna, æt. 49. Entered hospital May 1, 1869. Patient was always well, and, although uneducated, was a clever mathematician. Married twenty years; has five children; in good circumstances. Noticed, without any known cause, at the end of the year 1865, an increasing weakness of lower extremities, and loss of sensation therein. Soon after that darting pains were felt, which were not relieved by medicine, and increased in the fall of 1868 to the involvement of the entire legs, and the pains occurred particularly at night, with incontinence of urine. At the same time there was decrease of mental power. In December of same year, suddenly a severe apoplectic attack occurred, after which he became insane and was very violent. The restlessness and mental weakness kept on until he was admitted into the institution, when he exhibited a loss of all shame. Exalted ideas were well marked. He bought the whole house, and had control over millions to furnish this mansion in a beautiful manner. He was very violent. Speech became thicker and more unintelligible. He grew mentally and physically weaker, and in October, 1869, was taken home to receive private nursing, and died there in the year 1870. This patient presented a very good example of tabes, which after three years' duration attacked the brain, while before the psychical functions were not perfectly performed. This whole process showed itself as ascending dementia paralytica.

M. Hayem* described before the Society of Biology a case which presented remarkable cranial symptoms, and I will briefly outline the case, as I consider it to be one illustrating my subject.

H., aged thirty-seven years, entered La Charité Nov. 23, 1874. Parents both healthy. The patient is of feeble organization, and at the age of eight years he had scarlatina, but has never had any other serious trouble. He was a clerk, and wrote a great deal previous to admission. Toward the end of 1861 he felt "hot and cold," and on the cold days he had pains in his limbs which were darting. Toward the end of October (a month before entering the hospital) there was strabismus, with especial trouble in the right eye; there was marked diplopia. These symptoms were experienced only when the effort to write was made. He subsequently found difficulty in holding the pen. The muscular troubles in his fingers were even preceded by feelings of formication. The mind was unaffected.

Condition of Patient, Dec. 1.—The appearance of the patient indicated that he had suffered great privation. He is thin, pale, very anæmic. The painful points on the side of the nose are detected; there is considerable muscular atrophy of the face; many of the teeth have dropped out since the beginning of the trouble, and those that remain are carious. The muscles of expression are not paralyzed. The right pupil dilated more than the left, and the sight is more feeble in the right eye. In the right side of the face there is some loss of sensibility. Sense of smell intact.

The arms and hands are considerably atrophied; the sensibility is lowest in the skin of the right hand; no points of analgesia; sensibility to temperature is unaffected. When the eyes are closed the movements of the superior extremities are uncertain, particularly the right arm. Delicate acts of coördination are impossible. The sensibility of the shins, thighs, legs, and feet is increased. He is unable to stand with his eyes closed, and does not know when legs are changed which is which. His walk is uncertain; the right leg is more feeble. He does not feel as if he is walking on elastic balls. No headache, nor sleeplessness.

Dec. 22.—Progress of disease is slow.

Jan. 2.—Coördination more difficult.

Feb. 3.—Patient unable to leave his bed; can hardly walk. Lung trouble recognized. Both his eyes are directed to the sun, and he does not mind the light.

Feb. 4.—Painful sensation in the neck and right

* Wien. Med. Woch., No. 29, 1875.

* Gaz. Méd. de Paris, 1876, No. 19, p. 219.

eye; vision very feeble. The muscles of shoulders are atrophied.

Feb. 8.—Reflex movements can be still produced; the limbs are losing power gradually. No headache nor noises in the ears. Lung trouble increased.

Feb. 12.—The feebleness increased; "*il y a une véritable atrophie du système musculaire.*" Patient during the last few days has had difficulty of speech; speaks very slowly; the voice is somewhat nasal. No paralysis of the veil of the palate.

Feb. 25.—Constipation for several days.

March 5.—Feebleness and emaciation extreme. Bedsores. Incontinence of urine. Speech embarrassed. Diarrhœa.

March 7.—Pain in the throat. Sensibility completely disappeared in limbs. Fever; delirum; pulse 120°. Almost complete loss of reflex sensation. Œdema of left leg.

March 12.—Complete paralysis of legs. Tongue dry; speech almost abolished. All muscles contract to electric stimulation.

Autopsy.—The lungs were emphysematous. Exudation in pleura, etc. Kidney large and congested. Heart small; disease of mitral valves. *Head:* Dura mater healthy. *Brain and Cord:* Induration and atrophy were found at cervical lumbar regions. The posterior and right lateral columns are more altered than the opposite side. Vessels of brain healthy. The optic nerves were healthy except in the centre, where there was a gray deposit. The motor oculi were the seat of the same lesion at their apparent origin. The meninges were very vascular. There was no cortical trouble. The other parts of brain were apparently unaffected

Microscopical examination showed sclerosis of the post. column of the cord, with great quantity of granular bodies. The central canal was obliterated in the dorsal region; there is also sclerosis of the lateral columns.

The alterations in the medulla were seen at the root of the trigemini. The pyramids were healthy. Points of sclerosis were found at the nucleus of the facial, and in other parts. The motor oculi nerve were found greatly degenerated; a hyperplastic condition between fasciculi and a reduction in size of the nerve-tubes.

In the next case, one of my own patients, the symptoms of sclerosis were preceded for some years by epileptic attacks. I am inclined to think that the lesion existed in the white matter, and was gradually followed by changes in the gray substance both of the cord and brain. Her symptoms are very marked, both mental and physical, and are characteristic of abnormal changes of slow growth.

J. W., forty seven years, married. Condition on admission.—Has sharp pains in the legs, which first came two years ago; she calls them "striking pains." Tactile sensibility fair, and she appreciates touching and pinching. Reflex movements fair. Muscles of calf well nourished; some loss of coördinating power; cannot put the heel of one of her feet on the toe of opposite foot. Fingers numb. Marked ataxia of upper extremities; no diplopia, nor other weakness of vision. Very much constipated; menstruation irregular. She has had epileptiform attacks for the last twelve years, which occur at night. With the present symptoms there is considerable tremor in the upper extremities, which is increased with voluntary movements. Her hands are now numb and heavy. Her body sways to right and left when she walks. *Mental condition:*—Memory greatly impaired. Every two or three weeks she indulges in delusions of the most extravagant character; is emotional and tearful. She very often uses the French language, talking with a great deal of rapidity, and without a thought of what she is saying. She is easily excited, at other times she passes many hours of the day reading her prayer book. This is her present condition, and her disease has progressed but very little in the past year, except that her mind is more affected and her upper extremities are more involved. Her lips now tremble and her speech is somewhat thick. She cannot stand with eyes closed when unsupported. There is a slight history of syphilis, which is very uncertain. She lately had very extravagant delusions in regard to her home and her husband's condition. Has great difficulty in turning around. Her lucid intervals are very short.

In conclusion, I must refer to the fact that sclerosis in either of its forms is not unrarely preceded or associated with other nervous diseases. Mollière calls attention to Charcot's discovery that hysteria often preceded locomotor ataxia. Magnau has detailed cases of epilepsy connected with locomotor ataxia, and as for the complications of general paralysis, several English writers, chief of whom, if I am right, is Clouston, speak of chorea, epilepsy, neuralgia, and other neuroses as being very common.

PERINEAL LACERATION TREATED BY IMMEDIATE OPERATION.

By EDWARD J. BERMINGHAM, M.D.,

NEW YORK.

F. R., a delicately framed but healthy country girl, æt. twenty, primipara, was delivered of a living child instrumentally on the morning of the 30th June, 1876, upon which occasion I was assisted by Dr. J. J. Henna. Although every precaution was exercised to prevent such an accident, the perineum was lacerated to a considerable degree—the rent extending through the sphincter ani, and up the recto-vaginal septum about 1¼ inches. After a brief consultation, we decided to operate immediately, and accordingly, before the patient had recovered from the effects of the chloroform which had been administered prior to the application of the forceps, the ruptured surfaces were brought together in the usual manner, by interrupted silver sutures deeply introduced.

℥ ij. of Squibb's fluid extract of ergot was now administered to keep the uterus firmly contracted, and the knees were bandaged together. A couple of hours later this bandage was removed and the patient was placed in Sims' position, to prevent the lochia from flowing over the wounded surfaces. This position was maintained as much as was tolerable for the patient, and when she was permitted to rest on the back the thighs were not bandaged but allowed to remain apart. The urine was drawn off periodically by means of the catheter, and morphia was administered in sufficient quantities to relieve pain and confine the bowels. The vagina was periodically syringed with carbolized water, and the parts both externally and internally were kept scrupulously clean.

No bad symptoms supervened; the sutures were removed on the sixth day, when union was found to be complete. From this out the bowels were moved by laxatives, and on the 12th of July the patient was sitting up and feeling perfectly well. A thorough examination of the parts at this time showed their complete restoration to the normal condition.

The result of the operation in this case exceeded

our most sanguine expectations. As a rule, immediate operative interference in cases of rupture of the perineum does not seem to be warrantable. If the laceration; be incomplete it oftentimes heals by first intention, and surgical measures adopted for extensive complete rupture extending up the septum, as in this case, but too often give a bad result.

The reason of this non-success in many cases I believe to be due to the carelessness or incompetency of the nurses having the subsequent care of the patients. It is therefore of the utmost importance that the practitioner should attend to all the minutiæ himself. Another measure that should be considered as absolutely necessary to the success of immediate operation is the maintaining of the patient in Sims' position.

This will probably meet with a very decided opposition, but it is the duty of the attendant to insist upon it for a few days, as the only hope of a happy recovery. By this procedure the wounded surfaces are freed from the irritant lochia, and the battle is thereby more than half won.

102 West Forty-ninth Street.

Reports of Hospitals.

BELLEVUE HOSPITAL.

Notes of Practice and Peculiarities of Treatment.

AN ASYMETRICAL DEFORMITY.

There was a peculiarity in the case of deformity before us which is only occasionally seen, namely, lack of symmetry depending upon paralysis of the perineal muscles on the left leg and the tibialis anticus on the right.

FRACTURE OF THE EXTERNAL CONDLYE OF THE HUMERUS—NEGLECT OF AN IMPORTANT ITEM IN THE CASE.

A stout, healthy boy, aged seventeen, received a blow which gave rise to fracture of the external condyle of the right humerus. The limb was dressed in the fully flexed position, and passive motion commenced as early as possible. The manipulations were steadily kept up, and each day a perceptible gain was made until good motion was secured at the elbow-joint, such as enabled him to extend the forearm fully and to touch the shoulder with the hand. Strict injunction was given that the passive motion should be continued daily for a long time; but the boy went out, engaged in business which called into action the hands and wrists chiefly, and entirely neglected to attend to the motions of the elbow-joint. The result was, that he returned to the hospital after a short time with the forearm flexed at nearly a right angle with the arm, and the elbow-joint almost in a condition of false anchylosis.

REMARKABLE DURATION OF JAUNDICE—A POINT OF PRACTICAL VALUE IN CERTAIN CASES.

In the case before us jaundice was the only symptom. It was very marked, and had been tolerated without special inconvenience for nearly four years.

INSIDIOUS APPEARANCE OF PLEURISY WITH EFFUSION—PATIENT UNDER TREATMENT FOR HÆMATURIA.

A male patient entered the hospital and submitted to treatment for the relief of hæmaturia depending upon some cause not well understood. After he had been in a short time he complained of a very trifling cough, without expectoration, without fever, without marked shortness of breath, and upon examination of the chest evidences were found indicating the presence of fluid in one pleural cavity, as high as the spine of the scapula. No marked inconvenience was experienced by the patient, and that fact, together with the insidious approach, made the case worthy of note.

PLEURISY WITH EFFUSION IN A NURSING WOMAN—IMPORTANT QUESTION RELATING TO TREATMENT.

The rational symptoms and physical signs made the diagnosis of pleurisy with effusion, in the case before us, positively correct. The patient had a babe one month old, and the question arose, should the woman continue to nurse her child? Notwithstanding the weakened condition of the mother it was believed to be better that she should continue nursing, for the reason that the secretion of milk actually assisted in the removal of the fluid effused into the pleural cavity. Allow the child to nurse and compensate for the extra draught upon the nourishment of the mother by furnishing an extra amount of nutritious food. Besides, it was thought best not to wean so young a child just before the beginning of the hot season, unless circumstances rendered it absolutely necessary.

A NOTABLE CASE FOR HISTO PATHOLOGICAL INQUIRY.

A male patient had suffered from acute articular rheumatism, double pleurisy, pericarditis and bed-sores, and bade fair to elude the grasp of the pathologist by getting well.

EXCEPTIONAL SITUATION OF A POPLITEAL ANEURISM.

A laboring man, æt. 42 years, in whom no history of syphilis could be obtained, and whose habits were moderately good, was engaged, four months ago, in dragging three bags of oil-cake, weighing three hundred pounds, up an inclined plane, when he experienced a sensation in the left leg, just below the knee, as though some one had struck him a blow. So certain was he that he had been struck, that he inquired as to which one of his companions had given him the blow. He suffered some pain immediately after the occurrence of the accident, but did not discontinue his work, and was not much annoyed with symptoms for a period of two months. During that period, however, when straining at work, and sometimes when quiet in bed, he experienced an itchy sensation, and occasionally a pain, in the lower part of the popliteal region of the left side. Two months after the occurrence of the accident, he first noticed a tumor in the same region, but it was not large. To obtain relief a variety of external applications were made; but at the end of the third month after the accident he was compelled to abandon work. The tumor at the time of the operation, four months after the occurrence of the accident, had increased the circumference of the limb two and a half inches, and the entire limb below its situation was somewhat swollen. The situation of the tumor was quite exceptional, for it was found to overlap only a small part of the outer and lower border of the popliteal space; the chief extent being to the outer aspect of the leg and below the popliteal space. The question arose: was not the tumor a pulsating tumor of the bone? It was believed to be an aneurism, because it was a pulsating tumor,—a tumor with thin walls, a tumor that could be reduced in size by pressure upon the tumor itself, and also upon the artery above it, and was a tumor over which a distinct murmur could be heard, synchronous with

the first sound of the heart. For its cure the femoral artery was ligated, and the patient did well.

EIGHT ATTACKS OF ARTICULAR RHEUMATISM BETWEEN THE AGES OF FOUR AND TWELVE YEARS—ABSENCE OF CARDIAC COMPLICATION.

The first attack occurred when the boy was four years old; the last during the past winter, and extended over a period of six weeks before he was able to walk without the aid of crutches. The first attack involved the ankles and knees, confined him to the bed and house, and lasted about three weeks; the intervening attacks had varied somewhat in severity and duration, but had usually continued three or four weeks. Upon physical examination of the chest no evidence of cardiac complication could be found. Why the boy should have escaped heart disease after having had eight attacks of articular rheumatism between the ages of four and twelve was a question. It was possibly due to the mildness of the attacks.

CONGENITAL MITRAL STENOSIS.

The girl had not suffered any inconvenience from the cardiac lesion until puberty had arrived, when she began to experience "uneasy sensations," some pain and palpitation in the præcordial region. The murmur indicative of the lesion mentioned could be heard with the greatest ease. To improve the general nutrition of the patient was the idea involved in the treatment. For that purpose Vallet's mass was prescribed in four-grain doses, three times a day, and at the end of a week there was marked improvement. Rest was enjoined and also a nourishing diet Cod liver oil was not recommended because of a probable inability to digest it properly. Iron was believed to increase nutrition in some way, besides its mere effect upon the blood.

THE INNOCUOUSNESS OF VALVULAR MURMURS OF THE HEART, ILLUSTRATED BY CASES.

A male patient, æt. 27, was admitted to the hospital Nov. 5, 1875, and stated that, ten years ago, having fallen from a scaffolding, he immediately experienced great dyspnœa, expectorated blood, and some blood came from his ears. For some time after receiving this injury he suffered from cardiac palpitation and severe dyspnœa upon exertion. The patient was temperate, but admitted that he had venereal disease. He had never had rheumatism, but distinct evidence of aortic lesion was present. That fact led to the remark that aortic lesion in a patient who was not advanced in years, and who had never had articular rheumatism, was strongly suspicious of syphilis. For many years he had suffered but little from his cardiac trouble. It was thought quite propable that the heart sustained an injury at the time the patient received his fall.

AORTIC DIRICT AND REGURGITANT MURMURS.

In this case the murmurs were sufficiently distinct to be easily recognized, but the inefficiency of the valves was probably not extensive for the reason that there was only moderate cardiac enlargement. The man had never had general dropsy, or cough, or expectoration. He had complained of dyspnœa, but upon close examination it was evident that he did not draw a very nice line of distinction between dyspnœa and palpitation. The clinical teacher remarked that he should say to such a patient, "Your heart is unsound, but that does not involve any immediate danger or immediate serious consequences, and is not inconsistent with a fair degree of health." The great aim in the treatment was to control accessory circumstances, such as those relating to exercise, habits, diet, and the general nutrition of the patient.

TOLERANCE OF CARDIAC LESIONS—MARKED MITRAL DIRECT AND SOFT REGURGITANT MURMURS—DOUBLE AORTIC MURMURS.

These murmurs occurred in a male patient, æt. 30, who denied venereal, but was accustomed to the use of alcoholics, and had his first attack of acute articular rheumatism five years ago. From time to time he had had slight hæmoptysis. Two years ago he first noticed palpitation upon exertion, and occasional attacks of dyspnœa, which had modified somewhat in severity. The attacks of dyspnœa had increased in frequency during the last eight months. It was quite probable, however, that in this case also very much of what the patient recognized as dyspnœa was nothing more than cardiac palpitation. There was but little enlargement of the heart. The case, therefore, showed the tolerance of cardiac lesions. In this connection the question arose: can we have pulmonary hemorrhage dependent upon mitral obstruction, before the heart becomes enlarged? It was believed to be possible, but it was regarded as rare for profuse bronchorrhagia to occur dependent upon that lesion.

MITRAL REGURGITANT MURMUR.

This murmur was found in a male patient, æt. 23, who had been intemperate, had had syphilis, and four years ago had had acute articular rheumatism. The cardiac impulse was slightly strong, which was the only present evidence of cardiac hypertrophy. The patient suffered from headache, præcordial pain, dyspnœa, dizziness, and palpitation, all of which were increasd upon exertion. At the same time there was a murmur, with the first sound at the base of the heart, and it was suggested that that fact would explain many of the symptoms from which the patient suffered. The prognosis was by no means unfavorable, as regarded serious consequences within a short period of time. It was remarked that a slight amount of regurgitation might be tolerated for an indefinite period. The existence and character of cardiac lesions, however, should be determined in each and every case.

REMARKABLE LIMITATION OF THE SYMPTOMS OF CHRONIC GASTRITIS TO THE STOMACH.

The man had been sick four years. The first thing that attracted his attention was vomiting, and for two years an attack came on every fourth week, lasted from three to five days, and then ceased. Then came five months of cessation from vomiting. During the succeeding two years the vomiting occurred every third week to the very day, generally taking place before breakfast, and continued throughout the attack with only an occasional hour's interval. The vomiting was not accompanied by pain, but the day previous to its recurrence the patient was able to say that an attack was approaching, on account of a feeling of uneasiness and discomfort in the abdomen. Latterly the man had only a feeling of nausea, with regurgitation of a slight amount of fluid into the mouth during the morning. The material which he had ordinarily vomited had been simply a yellowish, frothy, sometimes bitter, sometimes watery substance. He had lost flesh and strength; had no appetite for his morning meal; but towards night was able to eat quite well. His bowels were regular, and had been undisturbed throughout his entire sickness. The symptoms had been limited to the stomach. There had been no headache or vomiting of blood.

It was believed that the case would receive the most certain and the most permanent benefit from the use of the stomach pump. It was recommended to wash out the patient's stomach with tepid water from two to four times a week, and continue that plan of treatment for some time. Patients very readily learned to do it themselves, it was said, and as the general condition improved, the pump could be used less and less frequently, and recovery would probably be complete. If for any reason that plan could not be carried out, it was recommended that powders containing bismuth and cubebs, five grains each, should be administered three times a day. It was also advised that a trial be made to ascertain whether acids or alkalies agreed best with the condition of the stomach. It was thought probable, however, that the good effect of the powders of bismuth and cubebs could be increased by combining with them five grains of the bicarbonate of soda, but at the same time it was a fact worthy of note that some patients were made worse by alkalies, while others were decidedly disturbed by the use of acids. The patient had been accustomed to the use of the sour wines, and, perhaps, the setting aside of those and substituting an alkali would be beneficial. The Rhein wine was regarded as a very good acid preparation to recommend in cases where acids were required. The digestion of a great many old people might be materially improved by the use of an acid while taking their dinner, and the Rhein wines fulfilled such an indication very well.

Progress of Medical Science.

A Case of Ureteroplasty.—By Prof. Nussbaum, of Munich. (Abstract from Bavarian *Intelligenz Blatt*, by Dr. Petershausen.)—Ovariotomy had been performed more than a thousand times, when it happened that Prof. Simon, of Heidelberg, accidentally cut through the left ureter at an operation. As he was compelled at the same time to remove a large part of the uterus, the urine afterwards ran both through the abdominal fistula, which formed itself in the cicatrix, and through the cervical cavity and the vagina. Great suffering was caused to the patient by this state of things. But at last the Professor ended her miserable condition by resorting to renotomy, which operation was a complete success, the remaining kidney soon assuming a two-fold function. Afterwards a similar misfortune occurred to Prof. Nussbaum, while removing an ovarian cyst of fifteen years' standing. The most difficult part of the work was the separation of the tumor from the uterus. Thus far the operation was successful; but it was noticed that, after several days, the quantity of urine was much less than it should have been, while at the same time a watery excretion oozed out of the abdominal wound. A close examination of the excretion showed that it contained urine. As the bladder was not injured, it seemed that the injury resembled that in Simon's case. An examination proved that the right ureter, which was closely connected with the ovary, had been cut during the operation. The woman made a quick recovery, but as there remained an abdominal fistula, through which one-half of the urine escaped, the poor woman was so exceedingly troubled by it that the doctor at last concluded to put an end to her suffering. There were different methods which the doctor had in view for this purpose. In this case he thought it would be best to conduct the urine, excreted by the fistula, to the bladder by the shortest way. This could be done, either by uniting the cut parts of the ureter, or by forming an artificial one. The doctor intended to try the first method. The abdominal fistula was dilated for two days, by laminaria bougies. Then introducing his left forefinger into the fistula, he could reach a reservoir of the urine, and the termination of that part of the ureter which was connected with the kidney. To reach the other end of the ureter, the doctor widened the urethra by Simon's dilator, but he was unsuccessful in finding the termination of the ureter. When he introduced a male catheter into the bladder, and pushed the latter upwards by it, his left forefinger in the fistula could be touched, the intervening space being no greater than an inch. This space was now penetrated by a trocar, and in the opening there was introduced a drainage tube. To its lower part there was attached a glass tube with a broad margin, by which an escape of the drainage tube towards the fistula was to be prevented, while a silver wire, fastened to the upper end of the tube, was led from this point through the fistula, and, by strips of adhesive plaster, attached to the skin. The drainage tube, which in this manner was kept in position, was intended for a supplementary ureter. Incontinence followed for three days, but in general the patient got along nicely. Some days later the tube unfortunately escaped, in spite of its rim, through the newly-formed ureter, and this became obstructed by flocculent matter. The urine was again excreted by the fistula, and the doctor had to introduce another tube. The upper end of this was likewise connected with a silver wire, but it was so much longer that its lower end protruded from the urethra, so that the urine ran into a vessel. The patient was very unwell for some days; but little urine was excreted by the fistula. To the astonishment of the operator he found the drainage tube, two days after its introduction, upon the patient's belly. This tube had also slipped upwards, as in the previous instance. However, an injection of litmus solution convinced the doctor that the artificial way was still open, and consequently he did not introduce another tube. The artificial way kept intact, a normal quantity of urine was excreted, and when, several weeks later, a few drops of urine were still excreted by the fistula, which was then very narrow, this was closed by cauterization. The patient's health became excellent afterwards.

The Epidemic of Typhoid at Croydon, England.—Dr. Buchanan's report on the late epidemic at Croydon, appears almost simultaneously with the subsidence of the disease; having been at first epidemic, then endemic, typhoid fever has at last disappeared, after fifteen months' sojourn in the district. There have been in all about 1,200 cases of fever in 942 houses. The disease was due to "the escape of infected air from the sewers, and its inhalation by persons susceptible to the disease." The Croydon water, as obtained from the well, was perfectly pure, but the pipes which conveyed the water into the houses were very frequently the vehicles by which the sewer air found entrance into the infected houses. The sewers were insufficiently ventilated, and the flushing arrangements were so defective as to allow, and even compel, the contamination of the water-supply whenever the sewers were flushed; so that the more the essential means for the removal of the excreta from the sewers were put into practice, the more the water became polluted by sewer gas. This is surprising, because one of the by-laws of the local Board of Health requires that

there shall be no direct communication between the water-source and the sewers. In many of the best houses, overflow pipes were found going direct to the sewers from cisterns in confined situations under the bed-room floors, a position for cistern and protection from overflow that were positively contrary to the by-laws of the Board.

Dr. Buchanan shows conclusively that the fever bore no relation to the rain-fall. He points out that the fever was co-extensive with the Croydon water area; and that houses served with Croydon water contained cases of fever, even where the drainage arrangements were perfect. He quotes the case of a large school, in which the water supply, being from the same source, came on the boys' side direct from the main, and was often stinking, while there was no complaint from the girls' side, which was served after the boys' were provided for. The fever was on the boys' side alone. Some Condy's fluid was put into the main, and the greater part of it was drawn off from the boys' tap, scarcely a stain of it reaching the girls' side. The water was complained of as stinking in various parts of the water area, but when analysed it was found pure—the inference being that sewer gas had found admission to the water pipes and polluted the water; but with the escape of the gas all trace of pollution was gone.

The report concludes with the following recommendations:

1. All public sewers that are not in good order and equal to their work must be replaced by perfect sewers.
2. The by-laws must be carried out, and the sewers be completely ventilated in such a way as to secure a constant current of air through every foot of sewer in the town.
3. The direct communication of houses with sewers must be interrupted, and an efficient independent system of ventilation applied to every house drain.
4. Means of flushing must be provided, such as shall not endanger water services.
5. There must be a separation of all water pipes from immediate connection with sewers.—*British Medical Journal*, May 20.

Cancer of the Pylorus.—Dr. Hutchinson, of Philadelphia, reports a case of cancer of the pylorus in which great relief followed the washing out of the stomach according to Kussmaul's plan, with a solution of a drachm of bicarbonate of sodium in a quart of water. Before this treatment was adopted the patient vomited after every meal, and occasionally a simple change of position would be sufficient to cause vomiting. Oxalate of cerium, bromide of potassium, restriction of the diet to milk and lime-water, and even feeding by the rectum, had been tried in turn, but nothing seemed to control the vomiting. From the time, however, that the stomach-pump was first employed until the patient's death, a period of rather more than seven weeks, vomiting occurred only twice, or at most three times. During this time she was able to take food freely, and was rendered so much more comfortable by the treatment that she begged for its continuance herself. Wyman's stomach-pump was the instrument used at first, but its manipulation required so much time that a Thudichum's douche was soon substituted for it. The rubber pipe of the douche was attached to the tube that was introduced into the stomach, and the alkaline solution allowed to pass into the stomach by its own gravity. While the tubes were still full the bottle was suddenly depressed below the level of the patient's body, and the india-rubber tube was detached from it, a siphon being thus formed through which the contents of the stomach freely flowed. In this way the stomach was completely emptied. This was repeated two or three times at each sitting, without the slightest discomfort to the patient. The operation was at first repeated every day, but it was afterwards found that every other day was sufficiently often to prevent vomiting.

This treatment not only rendered the patient more comfortable, but it enabled a positive diagnosis to be made by diminishing the distention of the abdomen and the extreme irritability of the abdominal muscles. Previous to its adoption no tumor or induration could be felt in the abdomen even on deep pressure, but during the third *washing out* a hard body was felt to left of the median line just under the arch of the ribs, and this was found at all subsequent examinations.—*Philadelphia Medical Times*, May 27th.

Syphilis.—Dr. Thiry recommends the following treatment in old and obstinate cases of syphilis:

℞ Hydrarg. cyanuret..... gr. $\frac{1}{65}$
Ext. opii..... gr. $\frac{1}{6}$
Ext. guaiaci..... gr. iss. M.

To be made into one pill. One such pill is to be taken four times a day at equal intervals, and followed each time by a glass of some sudorific infusion.

On the Intra-venous Injection of Chloral.—In *Lo Sperimentale*, Fasc. 1, 1876, V. Chirone declares himself strongly opposed to the injection of chloral into the veins, as first practised by Oré of Bordeaux. He declares that it is often followed by phlebitis, and that in Bernard's laboratory he has seen animals die during the injection, from arrest of the heart's action in diastole. It may also produce dangerous symptoms from the power of chloral to coagulate albumen. He can see no reason for preferring the venous injection to the ordinary mode of administration.—*Allg. Med. Cent. Zeit.*, April 29, 1876.

Bent Knee, Eleven Years' Standing, successfully treated by an Operation.—Eleven years ago, Dr. Bent was called upon to treat a child three years of age, with acute inflammatory disease of the knee-joint, where there was inability to move the joint without pain. There was no cause assigned for the injury, so it was attributed to the constitutional condition. Antiphlogistic measures were adopted, but the inflammation became chronic, and counter-irritants with alteratives and tonics constituted the treatment, which was kept up for years, and the leg became flexed upon the thigh, with wasting of the muscles of the leg and thigh. The disease in the joint ceased about one year ago, but the limb was deformed and useless. At this time Dr. B. chloroformed the patient and divided the biceps tendon, and gradually straightened the limb; it was then flexed and allowed to remain in the position which it had held for so many years. The knee was bandaged, and retained in this position for eight days without any pain or swelling ensuing. Being placed under chloroform a second time, the leg was straightened again, with less difficulty than at first. It was then placed in a box, extending two-thirds on the thigh and beyond the foot, and secured by a broad bandage over the knee, and a narrow one at each end. It was retained in this position for two weeks; then the box was removed, and the knee bandaged, and the patient gradually put on her feet. She was, at last accounts, able to walk the streets with the aid of a cane, and the doctor thinks she will soon be able to use the limb without any artificial support.—*Canada Medical Record*, May, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, July 29, 1876.

THE HYGIENE OF RURALIZING.

At this time of the year, when half the population of our cities are ruralizing, a great many questions concerning the strictly sanitary advantages of the practice present themselves for consideration. The physician, when he advises his patients to go to the country, does not as often as he might appreciate the responsibility which he assumes. There are so many qualifying conditions to be taken into account in the choice of a locality, that it is not surprising that many mistakes are made; that patients, instead of improving, get worse; indeed, that the very change which was thought to be beneficial had a direct influence in hastening their dissolution. Some of the disastrous effects of this advice cannot be very well avoided in the absence of exact knowledge concerning the effects of climate on disease; but there are other drawbacks which are preventable and remediable, and to which, as medical men, we should give our attention.

We are of the opinion that there is not enough care taken to guard against the causes of disease which are now so generally recognized as associated with the unsanitary rural retreats. The time has gone by when the mountain side, the river shore, or the ocean beach is a synonym of health, and that a hap-hazard guess at the salubrity of these localities is always attended with good results. It has become the habit, however, with some medical men to consult the conveniences of their patients as regards localities, rather than rely upon a positive knowledge of the claims of the said locality as a health resort.

We have had within the past few years numerous examples of sickness in some of our most fashionable summer hotels, due to the neglect of the most ordinary sanitary regulations. When we consider this possibility in connection with large and expensive hotels, supplied "with all the modern conveniences," how much more will such a possibility of danger be exaggerated in the numerous farm-houses tinkered into the appearance of comfort and health, and overcrowded in the hottest time of the year by temporary boarders. The practitioners in rural districts have readily offered their testimony against these abominations, or so-called country boarding-houses; and numerous cases of preventable diseases occurring in them have come to our notice, due not only to overcrowding, but to culpable neglect of drainage, foul drinking-water, and other disease-engendering influences. So common is this condition of things, that it is becoming the exception rather than the rule to find these farm-houses even decently supplied with sanitary conveniences. When we add to this the risk of contamination of drinking-water, the frequent possibility of which has of late been so painfully impressed upon us, we become aware of the fact that a country retreat, far from being a health resort, may be the positive source of diseases which do not exist in the cities.

We have repeatedly alluded to the dangerous condition of some of the religious camping-grounds, so largely occupied during the warmer months. Although much has been done to prevent disease, much more is required before we can be assured that the longer these grounds are occupied the more dangerously saturated will the soil become. It was only a short time ago that provisions were made to guard against the sewage saturation of one of the largest of these camping-grounds. Until then, drinking-water was obtained by the sinking of pipes in a sandy beach, while holes in the sand were the only receptacles for the excrement. It is impossible to estimate how many cases of disease and death have been prevented by these means, the timely adoption of which seems almost providential. But many of these pilgrim picnic grounds are not in such a desirable condition, and the breaking out of camp fever, diarrhœal and other diseases, seems to be the merest question of time. The same remark applies with equal force and in a proportionate degree to many of the farm-houses, whose drains are badly cared for, and whose crowded condition intensify the risks of speedy soil contamination.

We can hardly be accused of magnifying the importance of attention to these matters, when we take into consideration the recent experiences in England. The history of the Eagley epidemic is still fresh in the recollection of many of our readers, and has directed attention to a source of disease which has been almost entirely overlooked. A great many of the temporary maladies which are popularly ascribed to change of water and change of air are quite explicable in the light of recent investigations, and are believed to be due to foul swamps and contaminated wells. Another one of the many difficulties which present themselves to the physician, in his attempts to properly advise in regard to change of air and change of place, is the fact that we possess too little positive knowledge concerning the laws which regulate the endemic influences

of certain diseases. So many of the old theories which we have held regarding the influence of locality and of altitude upon disease have been so entirely overthrown by the actual observations of experience, that any positive assurance of salubrity is the merest guesswork. Endemic diseases are found to propagate themselves under the most opposite conditions. Intermittent fever is not only found in the valleys and in the neighborhood of swamps, but at the very mountain tops; diphtheria is everywhere, and no locality can be said to be entirely free from typhoid fever. It is true defective drainage will serve to explain some of the relations between cause and effect; but that we have yet to discover some influences which are invariably present, and which always produce certain effects, is painfully palpable to every careful student of disease. We are making some progress in the right direction, it is true, and that we have reason to hope for the attainment of some more exact knowledge concerning the now hidden laws is an encouragement to study the subject with greater thoroughness and more enthusiasm. In the meantime, and in view of the many obstacles to the full benefits of ruralizing, it behooves us to exercise that care in the giving of advice as regards change of locality which our responsibility to our patients renders obligatory upon us.

THE FLOATING HOSPITAL OF ST. JOHN'S GUILD.

THE Floating Hospital of St. John's Guild has commenced its good work for the summer. Regular excursions are made for the benefit of the poor and sick children of the metropolis, and thousands of sufferers by this means receive the benefits of change of air and scene which could be obtained in no other way. Being aware that the design of the managers is to afford the greatest amount of aid and comfort to the suffering little ones which their means will allow, we cannot resist the temptation of again urging upon them the practicability of extending the time of their excursions over one day. In many cases a very transient benefit is gained to a sick child by a short excursion, and not infrequently the fatigue of the trip more than counterbalances its good effects. We admit that in order to supply a popular demand as large a number as possible should be accommodated, and that the benefits of the charity should be widely distributed; but it seems to us that some modification of their present plans could be made available without directly interfering with the interests of the majority. The suggestion which occurs to us to make in the interest of that class who need a change of air for a longer time, is that once a week, for two or three days at a time, the hospital should be anchored somewhere in the Bay, and for that time be, not only in name, but in fact, a floating hospital. These trips could be distinguished from the others, and set apart for that class of cases which might be most benefited by them. We believe that such a plan could be carried out with very little trouble and but little extra expense.

Reviews and Notices of Books.

DETERMINATION OF THE REFRACTION OF THE EYE BY MEANS OF THE OPHTHALMOSCOPE. By EDWARD G. LORING, M.D. From advance sheets on the Ophthalmoscope. New York: William Wood & Co. 1876. Pp. 61.

WHEN Ludwig Mauthner, then assistant to Professor Jaeger the younger, of Vienna, published his text-book of Ophthalmoscopy, the attention of the profession was reawakened to the value of the upright method in the use of the ophthalmoscope. We say reawakened, for, as Dr. Loring says in his opening paragraphs, "the very method first proposed by Helmholtz still remains by far the most beautiful, comprehensive, and truthful of all the means yet in our possession for the exploration of the bottom of the eye." Edward Jaeger, Stellwag, and others, continued to speak of the importance of this method instead of the examination by the reversed image; but there was no good instrument by which it could be practised for the detection of errors of refraction, until, in 1867 or 1868, when Dr. Loring modified Liebreich's instrument by the substitution of removable cylinders for the clip for holding lenses behind the mirror, these cylinders containing a series of convex and concave lenses which could be brought in front of the eyehole in the mirror. This instrument suggested all the other refraction ophthalmoscopes that have followed; that is, those of Knapp, Wecker, and Oldham. None of them have supplanted Loring's instrument, No. 9. While Wecker and Oldham have not been careful to give the credit that is due Loring for having invented the first Ophthalmoscope by which the determination of the refraction is made a comparatively simple matter, Oldham described his instrument, when he presented it to the International Congress of Ophthalmology, in London, in 1872, as a modification of Loring's instrument; but his printed description of it, published in the Transactions of that body, on page 119, would not allow any one to know that the foundation for his slight, and to our mind useless modifications, were only to be found in the American instrument.

Again, Wecker, in presenting a new optometer to the Heidelberg Congress of 1875, *Zehender's Monatsblätter*, October, 1875, p. 458, does not mention Dr. Loring's instrument. We notice these things in the RECORD in order that our English and French friends may see that we are not entirely ignorant of the claims of our own authorities.

After a description of his ophthalmoscope, as well as of the modifications of Knapp and Wecker, Dr. Loring presents a clear and comprehensive account, in a very readable style, of the principles upon which the determination of the refraction of the eye depend. The reader of the 6th chapter of Mauthner's text-book will not find in this account a great deal essentially new, but those to whom the German language is not accessible will get in Dr. Loring's chapter an invaluable assistance to the fascinating study of the measurement of the refraction of the eye, a study first made really practicable by the author's ophthalmoscope; and we say this mindful of Jaeger's personal teaching on the value of the upright image. We shall look with great interest for the complete book of which

these are advance sheets. As it is, we know of no other work, or monograph, or chapter in a text-book in our language which supplies the place of the book we have been reviewing.

Reports of Societies.

AMERICAN MEDICAL ASSOCIATION.

Section on Practice of Medicine, Materia Medica, and Physiology.

In the absence of Dr. F. G. Smith in Europe, Dr. Joynes, of Richmond, Va., was chosen Chairman *pro tem.;* Secretary, Dr. B. A. Vaughan, of Miss.

Clinical and Meteorological Observations in the Study of Ætiology.

On the first day, Tuesday, June 6th, a Report was presented from Dr. N. S. Davis, of Illinois (unavoidably absent from the meeting), on the "Necessity for Coincident Clinical and Meteorological Observations and Records in the Study of Ætiology." The interest of active practitioners in some of the Western cities had been enlisted, but the Committee were not prepared to make any report. The Committee (Drs. Davis, J. B. Johnson of St. Louis, and H. A. Johnson of Chicago) were continued.

Extract of Malt.

There being no regular papers ready for presentation, Dr. F. H. Davis, of Illinois, offered some brief notes on "Liebig's Extract of Malt, and its Chemical Composition, Manufacture, and Therapeutical Uses." Dr. Squibb, of New York, being called upon for his views on the subject, alluded to the important part played by genuine diastase as a fermentable element. And yet how do we know that what the merchant or druggist calls diastase is such? At best it is a variable substance, that cannot be secured from material changes.

Treatment of Phthisic without Whiskey.

Dr. Palmer, of Michigan, agreed with Dr. Davis in his views as to the treatment of pulmonary tuberculosis in various stages without whiskey. After alluding to the different forms of consumption, he stated that he had met with the slow chronic variety of the disease, commencing with the inflammatory process throughout, more frequently in drinking men than in any other class. He also referred to the happy influence of opium and quinine in the early stages of the disease.

Dr. Angear, of Iowa, alluding to the production of sugar by the liver, stated that in fœtal life, even prior to the formation of that organ, as soon as we recognize the presence of cells, we detect this peculiar sugar. In a wasting case of typhoid fever, in which the whole system of nutrition has been involved, we need something for the patient that will aid in the formation of cells. We may possibly get it from the malt, by converting starch into the peculiar saccharine condition required, which may afterwards enter into the formation of oils and fats necessary for the blood-corpuscles and the nervous system or for cell-growth. It is peculiarly adapted to the derangement of nutrition attendant upon phthisis.

Dr. Davis stated that with proper care malt could be made on a common cook-stove; that chemists and druggists could readily prepare their own. Diastase should be made fresh at the time it is needed. The physician should prescribe but a little at a time, let it be renewed frequently, and kept in a cool place. It is a difficult preparation to manage, but he would not do without it in his practice.

Dr. Squibb inquired whether he had ever used malt itself; it could be employed with the same effect as the preparation already alluded to.

Dr. Joynes inquired whether the addition of a little alcohol would not be of advantage to prevent the disintegration or change that might occur in the diastase.

Dr. Squibb doubted whether this addition would be desirable. It would be difficult to add enough to keep it from moulding without neutralizing the diastase.

Dr. Davis stated that the good effects of the malt would be lost if fermentation took place in it after it was taken into the stomach.

Concerning Pepsin.

Dr. Angear said that he made pepsin himself from the calf's stomach, and asked Dr. Squibb what proportion of wine should be used in making it.

Dr. Squibb stated that the best pepsin was that which a physician makes for himself from a pig's stomach, which is more analogous to the human stomach; the pig to be fresh from the slaughter-house, and, if possible, warm. Wash the stomach in a little water to separate the mucus and blood; chop it up with an ordinary chopping-knife in a wooden tray; bruise it; put it into a bottle and cover it with wine, not containing over seven or eight per cent. of alcohol, two pints of the wine to a stomach. Malaga wine is used on account of possessing this alcoholic strength. Sherry wine should be diluted with one-half water, as it contains sixteen per cent. of alcohol. If the wine should be too strong it would interfere with the action of the pepsin in the stomach. When we use two pints to a stomach we get only one pint of pepsin, for it will be absorbed by the pig's stomach; then another pint may be added. The whole stomach should be used. It would be difficult to get the mucous membrane by itself cleared from a healthy stomach.

The Chairman did not think this latter a very difficult process. He had been in the habit of making pepsin for a number of years.

Dr. Eilrich, of Pennsylvania, stated that his experience with malt had not been very favorable. Perhaps the causes of his want of success were accounted for in the suggestions of Dr. Squibb. After all, to get the proper effect of remedies in these cases, we must change the hygienic and other circumstances under which our patients are living.

Dr. Davis's paper was referred to the Committee on Publication.

Treatment of Pertussis.

On Wednesday afternoon the Section again met, when Dr. J. J. Caldwell, of Maryland, called their attention to the use of bromide of potassium and belladonna in pertussis, applied before the face, by Key's simple spray-producer, in such a way as to insure the patient's inhaling it. They are, he thought, specifics in this disease. Quinine should be administered when the disease has a malarial origin.

Dr. Ulrich was sorry the discussion had taken place at this time, as he wished to offer a paper upon it, containing facts collected by himself.

Dr.—— had faith in vaccination as a remedy of the greatest efficacy in this disease.

Dr. Donahoe, of Ohio, had employed vaccination for years. He referred to the cures that had been effected by merely taking children to the gas-works. A severe

case of pertussis in his practice had been cured by the supervention of measles.

Dr. Ulrich, in response to an inquiry, said he would re-vaccinate if the patient had already been vaccinated.

Dr. Van Dyke, of Kentucky, also approved of the counter-irritant effects of vaccination.

Dr. Yandell, of Kentucky, believed that as a remedy it was impracticable. It was like giving garlic to a man who was fond of onions to take away the offensiveness of the latter.

Dr. Ulrich differed with the gentleman from Kentucky in his views as to the efficacy of counter-irritation in these cases.

Dr. Angear thought that as this was a nervous disease, any means which caused a discharge of the nervous influence should be resorted to in order to produce a subsidence of the disease itself. Chloroform, for instance, acted by bringing about a discharge of the nerve force.

Dr. Ulrich said that chloroform only abated disease, while vaccination was claimed to be curative.

ARSENIC IN SKIN DISEASES.

Dr. L. D. Bulkley, of New York, then read an interesting paper on the "Uses of Arsenic in the Treatment of Diseases of the Skin." He endeavored, while warning against a routine prescribing of the medicine, even in diseases in which it is of service, to show the real power which it possesses over cutaneous disease, taking issue with those who have neglected or decried its use; who, he thought, were influenced by the more rapid and in some instances now brilliant results of local treatment, which latter, in Dr. Bulkley's opinion, could not be obtained in the run of general practice by those not particularly familiar with this branch.

In demonstrating the controlling power of arsenic over eczema, he narrated cases where children and even young infants took the drug (with no other treatment) in increasing doses up to a quantity above that given commonly to adults, and that for months, not only with the cure of the disease, but with improvement to the health; and by frequent reference to other authors he showed the harmlessness of arsenic in medicinal doses, even when continued a long time.

A particular point in the paper was the introduction to use in this country of the old English preparation. De Valangin's solution of the chloride of arsenic, as more suited to the stomach. This has been recently introduced into the United States Pharmacopœia under the title of *Liquor arsenici chloridi*, which is of the same strength as Fowler's solution, or three times that of the old De Valangin's.

The indications and rules for the administration of arsenic were detailed; the diseases given in which it is of service, also those in which it is valueless.

On motion, a vote of thanks was tendered Dr. Bulkley, and his paper referred to the Association for publication.

Dr. Yandell alluded to struma and malaria as the two great causes of disease, and to the remedies applicable in each, especially in cutaneous affections. He believed that arsenic was a valuable agent in chronic forms of eczema. He was surprised at the large doses reported by Dr. Bulkley, especially for children. He was in the habit of giving arsenic in doses of one, two, or three drops of the solution in some tonic or water, and did not ordinarily deem it necessary to increase the dose.

Dr. Ulrich thought that Dr. Yandell attributed too much to malaria in these local or cutaneous diseases.

Dr. Yandell stated that he seldom used arsenic if the case was malarial; he administered quinine.

Dr. Ulrich said that arsenic given for a length of time to beautify the skin, or to a horse to improve its appearance for sale, ruined the system, and soon left the person or the animal languid and weak. He was surprised that such an effect of arsenic on the human system had not been alluded to by Dr. Bulkley. He was not satisfied that the Section should endorse everything that gentleman had said, but the paper was well worthy of publication and diffusion.

Dr. Octerlony, of Kentucky, thought the previous speaker overestimated the danger of medicinal doses of arsenic. Many arsenic-eaters are long-lived and enjoy good health. Dr. Yandell had attributed more to the influence of malaria than Dr. Bulkley or himself were disposed to admit. Dr. Bulkley's paper was, he thought, earnest, elaborate, careful, and the result of patient labor and thorough research. The solution of arsenic mentioned by Dr. Bulkley was weaker than Fowler's solution, and yet, given in the same doses as the latter, Dr. Octerlony found it to produce identical effects. He had found large doses of Fowler's solution do good to children with cutaneous affections, when smaller ones produced no effect. This rule is not an invariable one, however.

Dr. Duer, of Philadelphia, stated that some of the English dermatologists favored the use of large doses of arsenic. His own experience had been favorable to small doses, if given for any length of time. He was surprised that Dr. Bulkley had been able to administer such large doses successfully. He rarely prescribed arsenic to children.

Dr. Yandell thought that observations on the effects of arsenic might be made by physicians on themselves and on their medical students.

Dr. Angear asked what evidence there was that arsenic will contract the blood-vessels. Quinine has this effect, and may not the influence of the two drugs in skin diseases be connected with this point?

Dr. —— thought the dose of arsenic should be decided by the individual experience of every gentleman. Many of the guides and hunters and burden-carriers of Styria were found to be consumers of immense quantities of arsenic. Some of them were over eighty years of age, and had taken the drug for more than half a century.

THE NEW PHARMACOPŒIA.

On Thursday afternoon, Dr. Squibb acted as temporary Chairman, and at the request of several of the gentlemen present gave his views in regard to the next revision of the United States Pharmacopœia, allusion to which has already been made in the Record (June 17th, p. 395). The plan for the last fifty years had been for the delegates of the colleges to meet in convention, and appoint a committee of revision, who performed the labor and published the work. Wood, Bache, and Carson were either dead or would be prevented by ill health from laboring in the cause of the next revision. There was danger that it would go over to the commercial interests of pharmacy. The American Medical Association and the American Pharmaceutical Association should be more fraternal, or at least recognize each other more fully. They should come together on the subject of the Pharmacopœia, as their interests were mutual. The Army and Navy Medical Services should also be represented in this pharmaceutical council. Two editors should be appointed, one for the materia medica list, the other for the preparations, under the supervision of the Council. The Convention wished a Pharmacopœia based on general principles,

but the Committee did not like those general principles, and cut adrift from the Convention. Much time and labor was spent on it, but it was not the Pharmacopœia the Committee wished. The volume was one sought after by booksellers as a source of profit. What they paid for the privilege would compensate the editors and pay all expenses. The national associations need not be at any expense. He would bring the matter before the next annual meeting, as in Philadelphia any new plan would probably meet with opposition.

The Secretary of the Section urged the desirability of bringing this matter to the attention of the Association at once, instead of postponing it for a year.

Dr. Squibb then read the resolutions already referred to (p. 395), and, by general request, agreed to remain over to present them to the Association on the following morning, as the sentiment of the Section on the subject.

Dr. Elerich hoped the matter would be thoroughly agitated in the medical and pharmaceutical journals of the country.

ON CHOLERA.

Dr. Henry R. Rogers, of New York, then read an interesting paper on "Cholera; its Origin, Nature, Causes; Dissemination by Contagion, by Portability, and by Epidemic Influence; its Pathology, Microscopic Appearances, Treatment, etc., etc."

Dr. Thomas W. Foster, of Kentucky, stated that he had been through three epidemics of the disease. Want of success in treatment was often due to the fact that we slighted the early symptoms, and waited for treatment until prostration came. He thought that cholera was getting to be more sporadic than formerly.

Dr. Caldwell differed with Dr. Rogers in the view that early treatment was an easy matter. Isolation of the cholera was very important. Much was to be expected from a rigid quarantine.

Dr. Ulrich thought the laws of epidemics were as fixed and immutable as the laws of growth and reproduction. We have all the facts, and should know the proper treatment of this class of diseases. Dr. Foster of Nashville had told him that when a young man he rode forty miles to a village to see some cases of cholera for the first time. Here he heard two farmers discussing the subject, one contending that it was infectious, the other that it was contagious. Not being able to settle the point, they appealed to a third party, and asked what he thought about it. "Well, boys," said he, "it's a matter that's bothered me very much; sometimes I've had the opinion it's contagious, and circumstances have come to my mind that made me think it was infectious. One thing's certain; the damned thing's catching." Dr. Ulrich classed cholera among the neuroses. The influence of the mind in the spread of the disease was marked.

Dr. Rogers detailed several interesting cases of cholera, and the treatment employed, which may be briefly given as follows:—1. Acetate of morphia administered hypodermically. If no urgency, other remedies and other methods; opium and its preparations being preferred. 2. Horizontal position, with the head as low as the body, or lower. 3. Finely-powdered ice, *ad libitum*, for the mouth, or coldest water procurable in absence of ice. 4. External heat, frictions, etc. 5. For fever of reaction,—gentle opiate influence to be kept up, and remedies directed to the restoration of the action of the kidneys. 6. For collapse,—position, external heat, and frictions, and such internal use of nutriment and stimuli by the mouth and by enemata as may be judiciously employed. 7. After-treatment for restoration of wasted forces. Dr. Rogers dwelt particularly upon the happy and speedy influence of the hypodermic application of the morphia, which acted almost as a specific.

The paper of Dr. Rogers was then referred to the Committee of Publication.

After remarks by Dr. Curtis, of Michigan, on cases of cholera in St. Louis and Chicago, the condition of the blood-vessels in that disease, its neurotic character, etc., the Section adjourned *sine die*.

Correspondence.

MEDICAL CENTENNIAL AFFAIRS.

THE BUREAU OF EDUCATION—THE DEPARTMENT OF AGRICULTURE—VETERINARY SURGERY—CENTENNIAL MEDICAL HOSPITAL.

(From our Special Correspondent.)

PHILADELPHIA, July 22, 1876.

In addition to the exhibits made by the Medical Services of the Army and Navy in and near the United States Government building already described, the Department of the Interior presents in its Educational, Indian, and Agricultural Bureaus many interesting medical features. The Bureau of Education, under charge of Commissioner John Eaton, is a sort of central agency for the collection, preservation, condensation, and distribution of the general educational statistics of the whole country. It will thus be seen that it is not a controlling power, but that it merely gathers up for permanent record the results of the labors of others. If, as we learn is the fact, the Bureau, among its numerous duties, is compelled to analyze the annual catalogues, etc., of schools of divinity, law, *medicine*, and science, selecting from each what is worthy to be noted in the way of either improvement or defect, we fear that its labors are scarcely rewarded in the little of novelty that it gleans as to the progress of medical education from year to year. It annually corresponds with ninety-eight schools of medicine, but what information it obtains beyond the mere numerical statistics we are at a loss to conjecture. The only document of a purely medical character the Bureau has yet published is the contribution made by Dr. J. M. Toner, in 1874, to the annals of medical progress and medical education in the United States before and during the war of Independence. In its exhibit at the Exposition of the illustrative apparatus associated with medical education, the display is of rather a meagre kind, and gives but a faint idea at the appliances employed in first-class medical schools in the elucidation of anatomical or physiological facts. But we can scarcely expect anything more elaborate from a Bureau which has so many interests under its charge, and in the necessarily limited space assigned it is unable to make a specialty of any one of its departments. It has the appearance, however, of having temporarily borrowed for centennial display some of the apparatus and models of a surgical instrument-maker to cover up its own deficiencies, for we find in the two large cases assigned to this portion of their exhibit cards which read as follows:—"Borrowed from John Reynders & Co., 309 Fourth Avenue, New York." In the cases are diagrams of skeletons, papier-maché models, dissecting instruments, the original transfusion apparatus and its improved modern successor, the handsome transfusion

instrument of these later days, as well as that of Dr. Fryer. Near these is an explanatory paper for the benefit of the unenlightened public, who might otherwise gaze wonderingly at an apparatus of whose uses they were wholly ignorant. From it they learn that transfusion is one of the oldest operations on record, having come into prominent notice during the latter part of the fifteenth century, when the physician of Pope Innocent VIII. sacrificed three boys in performing the operation on his master, without saving the latter's life. It mentions the names of some of the Europeans who have performed the operation, and those of Flint, Morse, Thomas, Emmet, Fryer, and Stowe as having resorted to it in this country. A printed circular is also displayed, explanatory of the mode of employing the apparatus.

In another case this Bureau exhibits immense models of teeth, illustrative of dental physiology and anatomy, skulls, sectional views of the brain, etc. Chemistry and physics are represented by microscopes, test-tubes, a set of weights and measures exhibiting the peculiarities of the metric system, made by J. L. Hammett, of Boston, and a metric diagram by A. and T. W. Stanley, of New Britain, Conn. The Philadelphia College of Pharmacy is preparing a case to display the educational resources of that special department of instruction.

In the same case as that occupied by the reports of the deaf and dumb institutions of the country I notice certificates and reports of the Training School for Nurses attached to Bellevue Hospital, New York, near which is a framed photograph of the graduating class of this school, seven in number, of the spring of 1876. It would be like carrying coals to Newcastle to quote the facts detailed in this report, which demonstrate the great success of what was three years ago only an experiment, by which from good women, healthy in body and mind, are trained nurses who will carry the best kind of help and comfort to the bed-sides of the sick and suffering. Were this a report of any other institution than the one so locally familiar to many of the readers of the RECORD, I should be tempted to quote from its pages a paragraph or two, for the benefit of the profession, laudatory of the hospital training given in this school, which, in the phraseology of the Report, is synonymous with calmness, exactitude, quick observation, and implicit obedience to the doctor's orders.

The Department of Agriculture embraces a miscellaneous collection of soils, fertilizers, fossil bones, seaweeds, guano, grains, fruit, wines, etc. It would seem a hopeless task in such an *omnium gatherum* of useful and indispensable articles for the keenest reporter or interviewer to search for medical items; but in a solitary case are exhibited many indigenous articles of the materia medica, and numerous active principles in the daily routine of prescribing familiar to the profession. Here are jars and vials of stramonium seeds, flax-seed, black root or leptandra Virginica, veratrum viride, gelseminum, etc.; of sanguinaria, podophyllin, veratroidia, daturia, berberina, etc.

The only matters of professional interest in the War Department exhibit, but a few steps from those just described, are such as relate to the anatomy and pathology of the horse, so far as they concern his hoof. The veterinary surgeon must experience a high degree of satisfaction at the elaborate display made by the Government of injected preparations showing the arteries, veins, nerves, and tendons of the leg of the horse; of hoofs exhibiting the diseases arising from improper shoeing, superfluous growth, extraordinary enlargements with anchyloses of the os suffraginis, fractures, bony spavin and splint, etc. The Society for the Prevention of Cruelty to Animals possesses a most valuable adjuvant in the argument thus offered by the Government in favor of the proper treatment of the feet of this useful animal.

Leaving the Government building for the present, we may direct our steps to the head of Lansdowne Ravine, at which has been established the Centennial Medical Hospital. This building is intended for the temporary accommodation of all cases of sickness or injury that may come to it for treatment. Since it was opened, less than two months ago, between four and five hundred transient cases have been treated, none of which are allowed to remain over night. Machinery Hall has supplied its quota of mashed fingers, and the restaurants have added to the statistics of burns and scalds; but we are still far behind the Exposition at Vienna, in which a hospital similarly arranged is said to have averaged three cases of labor daily. The medical staff will doubtless find sooner or later that visitors to the Centennial will take advantage of the kindness and facilities thus offered to obtain gratuitous advice to which they have no claim. Dr. William Pepper, Medical Director, is in charge, with Drs. H. C. Wood, S. W. Gross, Curtin, Roberts, Osgood, Willard, and Herbert (Surgeon to the Guard), as his staff. A new tent hospital has just been opened for the guard, which body numbers eleven hundred men.

R. J. D.

COOL BATHING IN THE TREATMENT OF INFLAMMATORY BOWEL AFFECTIONS DURING THE SUMMER.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—I beg to offer through your columns a method of treatment of bowel affections of children in the summer season, where fever is present. It has been so successful with me, that I am confident, if applied more generally, it would lessen very greatly the rates of mortality in the summer season. I allude to that form of disease which is denominated entero-colitis

Before we are called to these cases, tentative measures for the relief of the diarrhœa have already been applied by the friends, so that the inflammatory stage is generally fully developed when we first see the patient. The skin is hot (temperature 102½° to 105°), the pulse rapid (130 to 150), respiration 30 to 50, with frequent purging of semi-fluid, greenish, watery, fecal, and half digested matters; the mouth and tongue are dry; the thirst intense, but the water taken to slake it is quickly thrown off; the eyes are staring; pupils contracted; insomnia and rolling of the head, with utterance of distressing cries, due to headache from hyperæmia of cerebral vessels and unappeased thirst. Such is a general statement of the symptoms.

I at once proceed to give the little sufferer a bath in hydrant water, which with us, in summer, is about 75°. I have found it necessary to give this my personal attention at first, because the mother or friends will not carry out instructions, on account of the cries and resistance of the child; it seems to them a great cruelty.

The contact of a hot skin with cold water is certainly painful for the moment, hence I immerse the body from legs upward gradually, sponging the skin in advance, so as to obtain tolerance.

When the body and extremities are fully under, holding the head in the palm of my left hand, I pour over its surface cooler water, such as cistern water, which is here about 65°. This is kept up for ten or even fifteen minutes. Meanwhile the child

ceases to cry or struggle, and is evidently greatly comforted; more especially when cool water is freely given to drink,—the greedy swallowing of which shows how much of its distress is due to thirst.

After the bath the patient should be wrapped, unwiped, in a light woollen shawl, and laid upon its bed, with a slight additional covering. The pulse has lost frequency, but is quite feeble; the breathing is slower and the skin quite cool, even bluish in hue. The sedation may seem at first too great; but reaction soon begins, a healthy warmth and perspiration are established, and the child falls into a peaceful sleep. The scene has so changed that one will find no difficulty thenceforth in getting a bath given three or four times in twenty-four hours, if the alarming train of symptoms make show of revival; and they will revive to such an extent as to require exhibitions of the bath from time to time for two or three days perhaps; for the diseased state of the mucous membrane within has not been as suddenly relieved as the abnormal heat of the body.

In the meantime internal remedies should be freely employed. Quinine, whiskey, beef-tea, milk, and lime-water are the chief agents. One grain of quinine and a drachm of whiskey every three hours, for a child eight to sixteen months old, looks rather formidable, but they will be found admirable while the disposition to fever lasts.

Subsequently bismuth and pepsin are of great value to restrain diarrhœa and to assist digestion, so greatly at fault owing to the blow which the mucous membrane has suffered.

C. G. Comegys.

Cincinnati, Ohio.

A SIMPLE METHOD OF OBTAINING DEPOSITS FOR MICROSCOPIC EXAMINATION.

To the Editor of The Medical Record.

Sir:—In certain cases, where the deposit in urine or other fluid is scanty, the difficulty of obtaining a satisfactory specimen for examination is so great that I am induced to publish the following simple device, in the hope that it may prove as useful in other hands as it has been in mine during the past year.

To a piece of glass tube, six inches long and three quarters of an inch in diameter, one of the thin glass covers for microscopic slides is attached by means of an india-rubber ring (a bit half an inch long, cut from elastic tubing about half an inch in diameter) so as to form a movable bottom. If the suspected liquid be allowed to stand in this extemporized vessel for a few hours, all sedimentary matters must, of course, settle upon the thin glass disc, which, after the supernatant fluid has been carefully poured off (or withdrawn by a siphon), can be detached and reversed upon an ordinary microscope slide for inspection. If the elastic band be made to project a line or two beyond the lower end of the tube, its free edge may be readily everted to affix or remove the disc, which it embraces without leakage.

In this way casts and other anatomical or pathological elements, no matter how few in number, can scarcely escape observation, as they sometimes do in the usual methods of fishing for them. This plan is especially serviceable for the examination of sediments in potable water, which is ordinarily in too small quantity to be satisfactorily collected otherwise.

The idea is so obvious that it may possibly have occurred to some one before me; in which case I shall cheerfully yield priority of invention, contenting myself with the reflection that "*Les beaux esprits se rencontrent.*"

Alfred D. Carrol, M.D.

New Brighton, N. Y., May 27, 1876.

PRELIMINARY EDUCATION.

To the Editor of The Medical Record.

Dear Sir:—The Cayuga County Medical Society desires to record its name with those of Erie and Ulster Counties as one who insists on a preliminary examination of all persons desirous of commencing the study of medicine under the supervision of any of its members.

At a regular monthly meeting of the Society, held July 12th, 1876, the following resolution was unanimously adopted:

Whereas, the profession of medicine, in its breadth and scope, requires the amplest preparation and most careful training to properly enable the practitioner to fulfil its many requirements; be it

Resolved, that it is the judgment of this Society that all persons who may desire to pursue the study of medicine and surgery in the office of any physician of this Society, shall submit himself or herself to an examination in branches preliminary to that study.

Halsey L. Wood, M.D.,
Sec'y Cayuga Co. Med. Soc.

115 Genesee St., Auburn, N. Y., July 14th, 1876.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from July 16th to July 22d, 1876.

Swift, E., Surgeon. Leave of absence extended two months. S. O. 142, A. G. O., July 14, '76.

Perrin, G., Surgeon and Medical Director. Granted leave of absence for one month, with permission to apply for an extension of ten days. S. O. 140, Dept. of the Missouri, July 10, '76.

Clements, B. A., Surgeon. Assigned to duty with Big Horn Expedition in the field. S. O. 98, Dept. of the Platte, July 17, '76.

Byrne, C. C., Surgeon. To proceed without delay to mouth of Big Horn River, M. T., and report to Brig.-General Terry for duty with his command in the field. S. O. 86, Dept. of Dakota, July 19, '76.

Kimball, J. P., Asst. Surgeon. To accompany battalion of 22d Infantry under Lt. Col. Otis, to mouth of Big Horn River, and upon arrival there, report to Brig.-General Terry for further instructions. S. O. 83, Dept. of Dakota, July 12, '76.

Harvey, P. H. F., Asst. Surgeon. To accompany battalion of 22d Infantry under Lt. Col. Otis, to mouth of Big Horn River, and upon arrival there, report to Brig.-General Terry for further instructions. S. O. 83, C. S., Dept. of Dakota.

Semig, B. G., Asst. Surgeon. Leave of absence extended one month, with permission to leave limits of this division and apply for a further extension of one month. S. O. 96, Mil. Div. of the Pacific, July 7, '76.

Taylor, B. D., Asst. Surgeon. To proceed immediately to mouth of Big Horn River, Mon. T., and report to Brig.-General Terry for duty with his command in the field. S. O. 85, Dept. of Dakota, July 17, '76.

Lord, Geo. E., Asst. Surgeon. Missing in action with Sioux Indians on Little Big Horn River, Mon. T., June 25, '76.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending July 22, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
July 15.....	0	10	21	3	14	31	12
July 22.....	0	6	21	3	13	25	8

The Treatment of Sun-stroke.—Dr. Charles Bliss writes as follows: I wish to call the attention of the profession through your columns to a method of treating sun-stroke which I have found very successful. Without entering into any discussion of the etiology of the disease, or the pathological conditions present during an attack, I will only say that, as a condition of success to any treatment, it must be applied before the patient's temperature has reached a point that is incompatible with the continuance of life, viz., 108° or 109° F. When called to a case of sun stroke we usually find the patient nearly if not quite unconscious, with stertorous breathing and generally complete muscular relaxation. In this condition he should be taken into the open air, his outer clothing removed, and his head slightly elevated. Cold water (not ice water) should then be poured freely over all parts of his person until his temperature is reduced to the normal standard. (Where a bath-tub is at hand it is to be preferred.) The application of ice to the head is of no benefit; the free use of water at its ordinary temperature accomplishing much more efficiently the general abstraction of heat from the patient's body. When consciousness is restored, which usually occurs in a very short time, the patient should be dried with moderate friction, removed to bed, and covered with only a sheet or very light blanket. A light liquid diet, with, if necessary, a mild saline aperient, will usually complete the cure in a few days. The use of stimulants is seldom necessary. Freely douching with cold water is as applicable to the lower animals when suffering from sun-stroke as to man. One of our largest street railroad companies has for many years past lost great numbers of horses every summer from this cause. This year, by my advice, the superintendent has adopted the plan of promptly douching with a stream from the hydrant every horse affected. So far the success has been complete; but one horse having died out of a great many attacked, and that one not having been subjected to the treatment. The main point in all cases is to apply the water promply and freely. [Although this plan of treatment is not new, it is nevertheless good.—Ed.]

Preliminary Education in England.—At the recent meeting of the English General Medical Council, Dr. Haldane gave the following account of the qualification of the usual candidate for medical college matriculation:

"In Edinburgh the standard for the preliminary examination was the minimum fixed by the Council; for obligatory subjects there were English, Arithmetic, Algebra, Geometry, and Latin; the optional subjects, of which the candidate was to take one, being Greek, French, German, and Natural Philosophy. This certainly was not too high a standard, but it was a melancholy fact that a very small portion of the candidates were able to pass this examination on the first occasion. The knowledge of English could only be said to be moderately satisfactory, and a certain number of candidates were rejected every year for deficiency in spelling. In Latin the deficiency was positively deplorable, not more than twenty or twenty-five per cent. passing on the first occasion. Two of the optional subjects—viz., Greek and German—were very seldom chosen, but the students selecting them generally passed. In French and natural philosophy the result was different, as he noticed that students often had a sort of smattering on these subjects. These results clearly showed that the knowledge of candidates was very deficient, and pointed to a comparatively low state of the preliminary education of the country. How it happened that candidates were admitted upon the Register who had such very deficient preliminary knowledge he did not propose to explain. He did not believe it was from any wish on the part of the different bodies to evade the directions of the Council, but rather from a sort of desperation. The candidates who appeared were often so bad that the examiners felt, if they rejected every man who ought to be rejected, comparatively few would be allowed to study for the medical profession. Be this as it may, there could be no doubt of the fact to which he alluded. The remedy was in the elevation of the general education of the country, but with that the Council could not interfere. The only other plan was to introduce the system of visitations that had proved so successful in the case of professional examinations; not that he proposed that the Council should send visitors to the different preliminary examinations, but that the different licensing bodies should, so to speak, visit one another. The object of his resolution was to recommend that in cases where candidates for professional examination displayed decided ignorance in general education, examiners should be requested to report on the matter to the bodies with which they were connected, and that those bodies should be recommended to transmit to the Council either the reports in question or a statement of the facts.—*Medical Press and Circular.*

Imperfect Drainage and Typhoid Fever.—Dr. Henry Flood, of Elmira, reports five cases of typhoid fever in one family, caused by imperfect drainage. When first called to attend the family (Mr. W.'s,) he made an examination to ascertain the cause and origin of the fever. In the rear of the house was a pool of water which extended to the rear of the house of a neighbor, Mr. G. Into this pond emptied a drain leading from a water-closet in Mr. G.'s house. Mr. G.'s privy was also situated on its banks, and there were also stables on its edges. In the summer this pond became stagnant and its drainage so imperfect that the water remained in it for months. After a heavy rain the water would flow back into Mr. W.'s cellar through a drain leading into the pond. During the summer of 1875 Mr. W.'s cellar was under water for nearly three months. In the fall of 1874 the father of Mr. G. was attacked with typhoid fever and died. The excrementa of the patient were thrown either into the privy over the pond, or into the water-closet, thus contaminating Mr. W.'s cellar water. Situated too between Mr. W.'s residence and this pond was a well for drinking water. This well was without doubt also contaminated, and the water was drunk by the persons who became subjected to the fever.

Original Communications.

THE THERAPEUTICS OF HEADACHE.

A LECTURE DELIVERED AT BELLEVUE HOSPITAL MEDICAL COLLEGE,

By A. A. SMITH, M.D.,

LECTURER ADJUNCT UPON CLINICAL MEDICINE.

(Phonographically reported by Dr. W. M. Carpenter.)

GENTLEMEN:—We take up to-day the therapeutics of certain forms of headache, a very important subject. Headache may be divided into organic and functional; but I believe you will get a better idea of the treatment by dividing the cases according to the causes.

You will remember we took up purely neuralgic headache at the last lecture.

A headache, when due to nervous disturbance, such as occurs in hysterical or excitable subjects, if associated with plethora, often yields to a saline cathartic. The most agreeable is the solution of citrate of magnesia, and should be given, a full bottle of it, on an empty stomach. In addition, it is well to give one of the bromides combined with valerian. The following prescription I frequently use:

℞ Sodii bromid..... ℥ vi.
Elix. valer. amm..... ℥ iv.
M. Sig. ℥ i. every hour until relieved.

If such nervous headache be associated with anæmia, after relieving the immediate attack with the bromide and valerian prescription, give iron, and give it for weeks, until there is a decided improvement in the patient's condition. Always give the iron after meals. In these anæmic cases it is often advisable to stimulate the heart's action. For this purpose I have found the following useful:

℞ Amm. muriat..... ʒ ss.
Tinct. actææ racemos.,
Aquæ.....āā ℥ iij.
M. Sig. ℥ ij. after meals in a wineglass of water.

If there be despondency and depression of spirits, phosphorus, with nux vomica, is a good combination. The unpleasant taste of the phosphorus has been overcome by being made into sugar-coated or gelatine-coated pills. I frequently prescribe a pill containing phosphorus gr. ¹⁄₁₀₀, with ext. nux vomica, gr. ¼ t. i. d., with the happiest results. These pills can be obtained of any reliable druggist. This despondency is apt to occur in those who have been overworked mentally, or are harassed by business cares, or who suffer great mental anxiety. If in addition to these symptoms there be sleeplessness, I employ the following pill:

℞ Camph. pulv.....gr. xxv.
Ext. cannab. ind.....gr. x.
Ext. hyoscyami.....gr. xx.
M. Div. in pill No. x.
Sig. One at night. Repeat in two hours if necessary to produce sleep.

It is important to attend to the general health of the patient. Remove all causes of excitement; encourage exercise in the open air; let the food be simple but nutritious; let the sleeping room be large and well ventilated; in short, let the patient be surrounded by the best possible hygienic influences. These general remarks will apply to almost all forms of headache.

SICK HEADACHE.

I usually recognize two forms of sick headache (so called), the one neuralgic in character, as hemicrania and trifacial neuralgia, the other a dyspeptic headache. In the neuralgic variety the pain in the head precedes the nausea, while in the dyspeptic variety the pain in the head succeeds the dyspeptic symptoms. In the neuralgic, vomiting does not relieve the pain, while in the dyspeptic an emetic or laxative often relieves the pain in the head by removing the cause. In addition to the treatment given in a previous lecture for neuralgic headache, which often occurs at intervals of a few days, or a week or two, sometimes coming on at sunrise and disappearing at sunset, I have good results from the use of guarana, or paullinia sorbillis as it is sometimes called. I give it usually in powder, grains fifteen every fifteen minutes, until six doses have been taken. It is best given in a little sweetened water; and if six doses do not relieve, do not continue it; it will probably not relieve. It is well to give these powders in any headache (not malarial) of long standing and prone to return at certain intervals.

MALARIAL HEADACHE.

Malarial poison may produce pain in any portion of the head, but the most frequent locations are the sub occipital region, the frontal, and on either side (hemicrania). Begin your treatment by the use of quinine. If distinctly periodical, give ten or fifteen grains two or three hours before the expected attack. It may be necessary to push the quinine in divided doses until cinchonism is produced, and kept up for several days, and then gradually diminish the dose. If the pain still continues to recur, and it frequently will, resort to arsenic and belladonna, five-drop doses each of Fowler's solution and tincture belladonna, after meals, increasing the Fowler's one drop each day until œdema arsenicalis is produced. This will seldom fail to give relief.

I have found the following prescription beneficial in a headache dependent on gout:

℞ Vin. colch. sem..... ℥ iij.
Lithii bromid..... ʒ ss.
Syr. zingib..... ʒ ss.
Aq. cinnamonii, q. s. ad..... ℥ vi.
M. Sig. ʒ ss. in a tumbler of Vichy water every four hours.

Such patients will be benefited by the regulation of the hygiene, tonics, a partial discontinuance of stimulants, particularly those which have been found by experience to aggravate the gouty symptoms.

It is hardly necessary that I should tell you that the headache of syphilis is more severe at night, and is quite apt to awaken the patient after twelve by its increasing severity. The use of calomel in one-tenth grain doses every hour, for twelve hours immediately preceding the time that it awakens the patient, gives more rapid relief than the ordinary constitutional treatment. The calomel treatment may be continued for two or three days, and then stopped and iodide of potassium given. I usually begin the iodide in fifteen-grain doses after meals, and gradually increase it until iodism is produced or irritation of the stomach occurs, provided the symptoms do not yield earlier. It may be necessary to push it to 350 or 400 grains a day before the symptoms yield.

The headache of rheumatism is characterized usually by tenderness of the scalp, which is increased on pres-

sure or motion. Use the mild faradic current on the scalp, and internally the following:

℞ Potass. iodide,
Amm. muriat. āā ʒ iss.
Infus. humuli. ʒ vi.
M. Sig. ʒ ss. four times a day in a wineglass of water.

In some cases of rheumatic headache, which have not yielded to the above treatment, I have found bromide of ammonium in twenty-grain doses every two hours effectual.

There is another form of headache which is of great importance as a symptom of serious disease. The pain in the head may be the first evidence you will obtain that there exists renal disease, and that you really have to deal with uræmic headache. The judicious plan of treatment in such cases has for its object the removal of the abnormal amount of urea from the system. To accomplish this, you may call into action one or all of the three great emunctories of the body, the kidneys, the intestines, and the skin. Make the kidneys act if you can; apply dry cups over the region of them, and give internally the following:

℞ Potass. acetat. ʒ vi.
Infus. digitalis. ʒ vi.
M. Sig. ʒ ss. q. 3 h.

The infusion should be made from fresh English leaves. Give this until the kidneys act freely, if you can make them do it within twenty-four hours. You cannot always rely on this, however. If the kidneys do not act freely, and the headache is not relieved within twenty-four hours, give a saline cathartic. A treatment almost domestic, and often very effectual, is to put an ounce of cream tartar in a quart of water, and have the patient drink this in eight or ten hours. It acts both as a diuretic and cathartic. Do not use hydragogue cathartics unless convulsions are threatened, they are too irritating to the intestinal canal. Some prefer to eliminate the urea by the skin. This can be done by diaphoretics and the hot, moist, or dry air bath. Do not think that you must use diuretics, cathartics, and diaphoretics in all cases of Bright's disease; use them where there is deficient quantity of urinary secretion, and where you have reason to believe urea is accumulating, and that you can relieve the patient by ridding the system of it. There are other causes of headache in Bright's disease which I believe occur independent of the presence of an abnormal amount of urea in the blood, and yet which are dependent on the results of the kidney disease. These causes may be anæmia, neuralgia, œdema of the brain itself, serous effusion into the ventricles, and, in acute Bright's disease, or cerebral congestion in addition to accumulation of urea. Under the last condition, if the headache be very severe and convulsions threaten, take blood, if the patient's condition will admit of it. Take twelve to twenty ounces, if necessary to relieve distressing symptoms. The best way to take it is by means of wet cups over the region of the kidneys.

If the patient be anæmic, improve the general condition by the use of tonics, good nutritious diet, stimulants, exercise in the open air, etc.

If the headache be dependent on serous effusion into the ventricles, or on cerebral œdema, here too improve the vitiated condition of blood and stimulate the heart and kidneys by potass. acetate and infus. digitalis. There is apt to be with this effusion and œdema general anasarca.

The headache of acute alcoholism, or inebriety, follows a debauch. The first indication is to remove the alcohol from the intestinal canal. For this give of rhubarb and magnesia calcined each a half drachm, and then give the following:

℞ Spts. amm. aromat. ʒ ij.
Tinct. camph. ʒ iss.
Tinct. hyoscyami. ʒ iiss.
Spts. lav. comp. q. s. ad. ʒ ij.
M. Sig. ʒ j. q. 1 h. until the headache is relieved, and then give capsicum gr. ij. and quinine gr. iij. before each meal for several days. If there be sleeplessness, give

℞ Sodii bromid. ʒ ss.
Chloral hydrat. ʒ iiss.
Syr. aur. cort. ʒ ss.
Aquæ. ʒ iiiss.
M. Sig. ʒ ss. at night, repeat in two hours if necessary to produce sleep.

Dyspepsia is a frequent cause of headache.

If there is indigestible food in the stomach, and it has been there some time, give an emetic, as mustard and warm water, or sulphate zinc gr. xv., and remove it. If there is evidence of indigestible food in the alimentary canal beyond the stomach, give gr. xx. of rhubarb and magnesia each, and remove it from the bowels. If the headache be frontal, and the pain is located immediately over the eyes, give dilute nitro-muriatic acid in ten-drop doses, well diluted, after meals. If the pain is located about the roots of the hair, give an alkali before meals, as gr. xx. bicarbonate of soda or magnesia. The dyspeptic headache oftentimes is not confined to these regions, but spreads over the entire head. In such cases I combine an acid with an alkali, and add to these nux vomica, as in the following prescription:

℞ Sod. bicarb. ʒ iiss.
Ac. nitro-mur. dil. ʒ ij
Tinct. nuc. vom. ʒ iss.
Syr. aurant. cort. ʒ vi.
Aquæ, q. s. ad. ʒ vi.
M. Sig. ʒ ss. after meals in a wineglass of water.

If there be gastric pain, a mild counter-irritant, as a mustard plaster to the epigastrium, will often relieve the pain in the head as well as the pain in the stomach. If flatulence be a troublesome symptom, give the following:

℞ Bismuth subcarb. ʒ iss.
Tinct. nuc. vom. ʒ iss.
Tinct. card. co.,
Spts. lav. comp., āā q. s. ad. ʒ iv.
M. Sig. ʒ ij. before meals in a wineglass of water.

If there be constipation, the following pill may be given, one in the morning:

℞ Aloes pulv. ʒ ss.
Ext. nuc. vom. gr. v.
Ext. belladonna gr. iv.
M. Div. in pil. No. xv.

In some forms of headache associated with stomach indigestion I have found small doses often repeated of tinct. nux vomica effectual. I give a single drop every fifteen minutes, and continue this two or three hours if necessary. In other cases, where the headache comes on soon after a meal and seems to depend on delayed stomach digestion, large doses of pepsin are effectual. Give a half drachm saccharated pepsin in a wineglass of sherry wine, t. i. d., and let it be taken during meals.

Cerebral congestion as a cause of headache may be divided into two varieties, active and passive. These claim almost directly opposite plans of treatment. In

the active variety the patient should be kept in a darkened room, perfectly quiet, cold and evaporating lotions applied to the head. A saline cathartic may be given, and the following prescription:

℞. Sodii bromid ..... ℥ iiss.
Fl. ext. ergot ..... ℥ iiss.
Syr. zinzib ..... ℥ ss.
Aq. aurant. Flor. q. s. ad ..... ℥ iv.
M. Sig. ℥ ss. q. 2 h.

If the skin be hot and dry, and the pulse full and rapid, give Fleming's Tinct. Aconit. Rad. gtt. ii. q. 2 h. until the heart's action is sensibly diminished. Sometimes a hot mustard foot-bath will give relief.

The passive congestive variety demands a different mode of treatment. In many cases this variety is found associated with cardiac disease, and most frequently where there is predominant dilatation. Hypertrophy gives rise to the active variety. Improve the condition of the blood by the use of iron, quinine, bitter tonics, alcoholic stimulants, good food, and stimulate the heart's action by the use of the following:

℞. Tinct. digitalis ..... ℥ iii.
Spts. amm. aromat ..... ℥ vi.
Spts. lavand co.,
Syr. simp. ää q. s. ad ..... ℥ iii.
M. Sig. ℥ i. q. 4 h.

Cerebral anæmia produces a headache, which is often mistaken for the passive cerebral congestive form. It is often associated with general anæmia, nervous exhaustion, and may occur in heart disease in consequence of enfeebled heart power, such as is met with in enlargement with dilatation, fatty degeneration, and myocarditis. Improve the general condition of the patient, and stimulate heart's action as recommended in the passive cerebral congestive variety. Nitrite of amyl will relieve the immediate headache. Let the patient inhale three to five drops of it on a piece of cotton, placed within one nostril while the other is held closed. When associated with nervous exhaustion, I employ the following:

℞ Strych. sulph ..... grss.
Tinct. fe. chlor ..... ℥ ij.
Glycerine ..... ℥ ss.
Infus. gentian q. s. ad ..... ℥ vj.
M. Sig. ℥ ss. after meals, in a wineglass of water.

A word as to alcoholic stimulants. These are beneficial in headache dependent on cerebral anæmia. Champagne is a specially favorite form, and is much relished by those who suffer from nervous exhaustion. You should use caution in recommending it to such patients, as it may lead to serious results. Give it always as a remedy and not as a beverage. A safe plan is to recommend brandy, a tablespoonful after each meal, and limit the champagne to one glass, and let it be taken with the dinner.

Cerebral tumors give rise to headache, often severe. In all cases of cerebral tumors, give iodide of potassium; for it cannot be safely said that in any given case the tumor does not depend on syphilis, and by administering the remedy you give the patient the benefit of the doubt.

There is reason to believe, too, that patients with cerebral tumors, dependent on other and unknown causes, are benefited by the use of iodide of potass. I have previously given you directions as to the method of giving the iodide. Sometimes the pain is so severe that you are justified in resorting to opium to relieve it. If there be much sleeplessness, give sleep by the use of the bromide and chloral mixture.

The headache of cerebral softening may be palliated by opium and rest. Such patients should have the best possible hygienic surroundings. If there be sleeplessness and much irritability of the nervous system, the combination of bromide with chloral is indicated. Ergot has been used for the relief of the headache, in these cases, by those having charge of insane asylums, where this condition is frequently met with, and the testimony is in its favor as a valuable remedy. It is usually given in large doses, beginning with ℥ j. of fl. ext. ter in die, and gradually increasing to ℥ ss. ter in die.

Almost all cases of increase of temperature of the body above 103°, are attended with headache. To relieve it reduce the temperature, according to the plan given in a previous lecture; apply cold and evaporating lotions to the head, and keep the patient free from noise and excitement. A full opiate will often relieve such a headache, save the patient much suffering, and effect favorably the progress of the fever.

The mere mention of worms in the alimentary canal, hemorrhoids, uterine and ovarian disturbance, and optical defects, as causes of headache, will suggest the remedy.

DIAGNOSIS OF ANEURISM.

By W. B. DUNNING, M.D.,

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In a very interesting and instructive monograph on the Diagnosis of Aneurism, Dr. Stephen Smith remarks "that the symptoms most relied on in the diagnosis of aneurism may be present when there is no aneurism, and may be absent when aneurism exists." * In illustration of this truth I beg to report the two following cases:

I. Aneurism Mistaken for Semi-Malignant Tumor.—A few years ago I was invited, being then house-surgeon to Bellevue Hospital, to see a case of tumor in the popliteal space, which it was proposed to remove. The patient was an Irish laborer, 32 or 33 years of age, who had always had good health until two or three years before, when he first noticed a small growth of the size of a walnut in his left popliteal space. He had never received any injury in this region, had never had syphilis, and knew of no cause which could explain its presence. It had gradually increased in size until the time of my visit. In consequence of its increasing size and its apparent effect on his health and spirits, the patient had been for some months desirous of an operation for its removal. His surgeon, a man of skill and experience, had repeatedly examined the tumor, and, without expressing a positive opinion save that it was not an aneurism, was inclined to regard it as a sarcoma. When I saw the patient he was somewhat emaciated, but on the whole all his functions were in a healthy condition, except that lack of exercise and anxiety might have depressed his spirits and strength. The tumor was then about nine inches in circumference, completely filling the popliteal space, and protruding from it about three inches, spherical, hard and inelastic, non-adherent to the skin, having no pulsation, uninfluenced in size by pressure on the femoral artery, and having no bruit. A piece of paper was laid upon the tumor, but received no perceptible movement from it, thus giv-

* *American Journal of Medical Sciences*, 1853, vol. [illegible], p. [illegible], vol. [illegible], p. 101; and 1874, vol. i., p. 17.

ing additional evidence of the non-existence of pulsation. Neither did the pulsation of the artery below the tumor seem at all diminished. Was it an aneurism? This was the first question suggesting itself to me on seeing the patient, and all the tests indicated above were applied to answer the question. It was a tumor in the course of an artery, but presented no other feature whatever of an aneurism. As an experimentum crucis, a hypodermic needle was inserted, but its withdrawal was followed by no liquid of any kind. Our opinion then was, that it was probably not an aneurism. My friend, who was in charge of the case, was certain that it was not, but my hospital experience had impressed me with the uncertainties in the diagnosis of tumors, and particularly of aneurisms, and I was less confident. He decided to operate at once. The attempt was attended with the most profuse hemorrhage, followed in a few hours by death. The tumor, as examined after death, was found filled with concentric layers of fibrine, occupying its entire space save a small cavity in the course of the artery. This condition of the tumor went far to explain the absence of symptoms. It had no appreciable pulsation nor bruit, because so considerable a mass of fibrine intervened between the artery and the examining finger. It did not diminish in size on pressure of the artery above, because its constituents were almost wholly solid, and this pressure could remove only the liquid portion, and finally an exploratory puncture brought no blood, because the needle penetrated only into the solid fibrine.

II. Fatty Tumor Mistaken for Aneurism.—A lady over eighty years old recently died during my attendance upon her, having presented during the two months preceding her death symptoms, subjective and objective, of mitral insufficiency. She had been for many years a sort of curiosity to the medical men of the neighborhood, on account of an immense tumor on the right side of the neck, which had been regarded by all who had examined her as an aneurism. It had existed over thirty years, and her friends had been repeatedly warned that it might rupture at any time and the patient bleed to death. But she continued to live, the aneurism did not rupture, and she died at a good old age of another disease. At the time of death, this tumor was about thirteen inches in circumference, of an ovoid form, non-adherent to the skin, inelastic, hard to the touch save at one circular spot an inch in diameter, and had presented three features of an aneurism, viz.: (1) a tumor in the course of an artery; (2) an expansive pulsation felt distinctly by the finger placed on any part of the tumor, and (3) a distinct bruit. Pressure on the artery was impracticable as a test; and, as for years there has been no question as to operation, no exploratory puncture was made. I repeatedly examined the tumor during life, and never failed to detect both the pulsation and the bruit. Many other physicians had also examined it, and all agreed, so far as I can learn, in the opinion that it was an aneurism. The post-mortem section showed the falsity of this opinion, presenting an immense fatty tumor, surrounded by layers of calcareous plates.

Looking back on this case, it hardly seems possible that any other opinion could have been formed than was formed. The long duration, indeed, seemed to contra-indicate aneurism, but, on the other hand, how otherwise could be explained the expansive, uniform pulsation, and the bruit?

Small-pox has been fatally prevalent for many weeks in Manchester, Salford, and Liverpool.

Reports of Hospitals.

BELLEVUE HOSPITAL.

Aneurism and Diseases of the Heart.—Notes of Practice and Peculiarities of Treatment.

Thoracic aneurisms—remarkable duration—independent of injury, syphilis, or rheumatism—difficulty in diagnosis.

Three cases were seen which illustrated points of sufficient interest to make them worthy of mention. The chief point of interest in the *first* case was the long duration of the aneurism when considered in connection with the present condition.

The patient was a man, æt. 32 years, and had been admitted to the hospital in 1872. There was a very indistinct history of syphilis in the case; no history of rheumatism, and the man had been temperate. Evidences of thoracic aneurism were found when he was admitted, and at the last examination there was an undoubted aneurismal tumor, about four inches in diameter, situated in line of the ascending portion of the aorta, and projecting to the right and anteriorly. It had made its way through the thoracic walls and was covered only by fibrous tissue and integument. A double murmur and slight fremitus were obtained, and the tumor had both pulsating and expansile movements. There was present also a double aortic murmur; also a mitral direct murmur, and a very faint mitral regurgitant murmur. No particular restriction of the patient has been insisted upon, and yet he was exceedingly comfortable. There was a point with regard to the medicinal treatment in this case which will be mentioned after reference has been made to the other cases. The case was instructive with regard to prognosis.

The *second* case was interesting on account of its long duration, and also the remarkable diminution which had taken place in the size of the tumor. A male patient, æt. 38 years, who gave a syphilitic history, and had suffered from hæmoptysis prior to the evidence of aneurism, was admitted to the hospital the last time in 1873.

In this case, also, the tumor had made its way through the chest wall anteriorly, and the end of the eroded second costal cartilage could be distinctly grasped by the fingers. One peculiarity of the case was that there had never been present any aneurismal murmur; nor were there any cardiac murmurs. In neither of these cases was there any obstruction of the radial pulse. The aneurism in this case had been in existence probably between four and six years, and within the last year and a half had diminished in size nearly one half. In this case, also, no restriction had been insisted upon, and the patient had several times returned to the hospital drunk, when given a leave of absence. Evidences of lung consolidation had developed within a few months, but, notwithstanding that and the aneurism, the man was feeling very well. He also had been receiving the remedy to be mentiond hereafter.

The *third* case was one in which there had been some question with regard to diagnosis, and the history will be given in detail.

A laborer, æt. 42 years, was admitted, and gave the following history: He had had "chills and fever," which was all the sickness he had ever had in his lifetime. He had not had either syphilis or rheumatism. The first thing noticed was a pain in the chest extend-

ing from a point midway between the sternum and nipple, across to and down the under side of the right arm, but when lying upon the back the pain would stop entirely. It was made worse by exercise and a deep inspiration, and there was shortness of breath, but no cough or expectoration. He had suffered somewhat from bleeding piles. That completed the history. The chest being exposed, a pulsation was noticed in the second intercostal space to the right of the sternum; pulsations were seen in both carotids, in both subclavian arteries, most marked upon the left side; a diffused pulsation around the apex; a pulsation in the epigastrium; but at no point in the chest wall was bulging or retraction apparent. Upon palpation a purring thrill was felt over the apex; an impulse under the clavicle in both sides, and a slight impulse at the point where the pain first commenced. The apex-beat was carried downward and farther to the left than normal. Upon percussion an increased area of dulness was found over the ascending portion of the arch of the aorta, and to the right, and cardiac dulness extended two inches to the left of the nipple.

Upon auscultation, a murmur, having its maximum intensity over the apex, preceded the first sound of the heart; another murmur, synchronous with the second sound of the heart, was heard with its greatest intensity at the base; also a double murmur over the left carotid, besides a peculiar pulling murmur over the area of dulness to the right of the sternum, which was synchronous with the cardiac impulse, but absent when the patient was in the horizontal position, and sounded more like forcing air out of lung tissue than a real aneurismal *bruit*. The respiratory murmur was less distinct upon the right than upon the left side of the sternum, but the absence of bronchial breathing excluded lung consolidation. There was only slight diminution in the intensity of the respiratory murmur in the neighborhood of the area of dulness at the right of the sternum. Pulsation in the right radial artery was less distinct than in the left.

The case was interesting for two good reasons:

1. It illustrated how extensive cardiac disease might become independent of injury, syphilis, or rheumatism.

2. It illustrated the difficulty in making a diagnosis in certain cases, and also showed how easily the real difficulty might be overlooked, for the patient had already been treated for pleurisy and neuralgia, but in neither instance had a physical examination of the chest been made. The case has been placed in this group not because the symptoms were positively diagnostic, but rather because they were strongly suggestive, and is thus turned over to the reader for study.

Now, with regard to treatment, all three cases had received the iodide of potassium in large doses, and in all a marked improvement had been manifested. But there was one thing to be thought of while estimating the effects apparently produced by the drug, namely, that *rest* had been enjoined, although no special restriction had been insisted upon, such as lying in bed; and the question naturally arose: was it the *rest* or the *drug* that afforded the relief?

ACUTE BRIGHT'S DISEASE—SIALAGOGUE EFFECT OF JABORANDI.

The case presented certain peculiarities which made it worthy of note. When admitted, only 7½ to 11½ ounces of urine were passed in twenty-four hours, and it contained albumen, epithelial and granular casts. The patient was dry-cupped over the kidneys; received a cathartic, composed of croton oil, podophyllin, and elaterium, and dram doses of the fluid extract of jaborandi. The latter was administered for the purpose of producing diaphoresis, and soon after the second dose was given the patient broke out in exceedingly profuse perspiration, and, in addition, the remedy acted as a sialagogue to such a degree that ℥ xxii. of saliva were collected in four hours. At the time of our visit the patient was passing ℥ lx. of urine in twenty-four hours, acid, had a sp. gr. of 1023, and contained no albumen. After the operation of the cathartic, the infusion of digitalis with acetate of potash was administered.

THE SIALAGOGUE EFFECT OF JABORANDI PREVENTED BY HYPODERMIC INJECTIONS OF MORPHIA AND ATROPIA.

When jaborandi is to be administered it has been customary to precede it with a hypodermic injection, consisting of ½ of a grain of the sulphate of morphia, and $\frac{1}{67}$ of a grain of the sulphate of atropia. This has been done for the purpose of preventing salivation, and has proved successful.

ACUTE ARTICULAR RHEUMATISM TREATED WITH SALICYLIC ACID.

A number of cases had been treated by administering six grains of the acid every two hours, and continuing it in from six to ten grain doses three times a day, as the acute symptoms subsided. In every instance the symptoms had been markedly relieved, and, as a rule, quite promptly. This plan was adopted independent of the use of alkalies.

BRONCHOCELE—TREATMENT BY INJECTIONS OF ALCOHOL.

A male patient, æt. 28, native of Delaware Co., N. Y., first noticed that his neck was enlarged twelve years ago, and the enlargement had been generally increasing since. The goitre was enormous, and most marked upon the right side.

The case was to be treated by hypodermic injections of about twenty drops of alcohol, repeated according to effect produced. The injections were used with the idea of producing shrinking, as the result of the formation of new connective tissue in the enlarged organ.

POTT'S DISEASE—PARAPLEGIA.

The disease commenced in this case about twenty-three years ago. There was no paralysis when the bone disease was first developed, and probably the healing process was almost completed when the paraplegia first appeared. The first attack of paraplegia occurred in 1857, lasted sixteen months, and involved both motion and sensation. He laid upon his back all the time, being entirely unable to stand or use the legs. Complete recovery took place.

The *second* attack occurred about the year 1872, and lasted about two months. In that attack motion only was involved; again recovery was also complete.

The *third* attack of paraplegia occurred only a short time since; was of brief duration; involved motion only, and was followed by a complete recovery.

How were these attacks to be explained?

The *first* was believed to be due to the pressure from the deformity itself giving rise to an obstruction in the circulation, or pressure from an accumulation of inflammatory products.

The *second* and *third* attacks were thought to be due to some reflex condition, or perhaps due to some circulatory disturbance. The ready manner in which recovery took place seemed to place them beyond being due to pressure.

INFLUENCE OF PREGNANCY UPON THE UNION OF FRACTURED BONES.

A female patient had sustained a fracture of the lower end of the radius about two months previous to her confinement, but union had not taken place when the child was born. She went on and nursed her baby; but union not taking place, as was expected after confinement, the child was weaned, and the bones united within a very short time.

Two other cases were noted in which fractures had occurred during pregnancy, and in which union did not take place. On the other hand, a woman who had been pregnant about two months was brought into the hospital because of a compound fracture of the femur. It was thought by some of the visiting surgeons that amputation was necessary, but the patient refused, and the limb was dressed by means of the ordinary extension and counter-extension apparatus known as Buck's extension apparatus. Miscarriage threatened for twenty-four hours, but did not occur, and good union of the bone took place. The patient being rather uneasy and quite troublesome, got up after union had occurred, and in some of her perambulations fell and fractured the same femur the second time at about the same place where the first fracture occurred. The fracture was reduced, and when we saw her, union had again taken place.

HYSTERICAL HIP-JOINT DISEASE.

The patient was a girl about sixteen years old, and had been sick three years. She said she received an injury from a fall, and that then the trouble about her hip began. The position of the limb was such as seen in the second stage of morbus coxarius, but when an examination was made with reference to that disease, not a single symptom was present except the obliteration of the gluteo-femoral crease. Besides, the limb affected was larger than the well one. The visiting surgeon regarded it as a case of hysterical hip-joint disease, for the girl was exceedingly nervous, and at the same time he gave a very unfavorable prognosis as regarded the ultimate usefulness of the limb. For, as far as his experience had enabled him to judge, the peculiar condition which prompted or compelled or induced such patients to simulate deformities could not be easily, if ever, overcome.

HOW TO DECIDE THE QUESTION OF OPERATION IN A CASE OF PERI-TYPHLITIS.

The case was one in which well-marked symptoms of peri-typhlitis had been developed, and a hard mass extending from low down in the iliac fossa to above the crest of the ilium could be distinctly mapped out by palpation and percussion. Tenderness was very well developed upon pressure over the same region, and there was arrest of respiratory motion below the umbilicus. Pulse 110, and temperature 101½° F. The patient received a moderate amount of opium, was kept perfectly quiet in bed, and had local applications of light warm poultices. At the time of our visit he had been in the hospital three days, and had been sick a week before his admission. On the seventeenth day of his sickness there was less pain, the tumor had diminished in size, and it was quite evident that resolution was taking place. That fact led the visiting physician to remark that he had seen several cases of peri-typhlitis which had progressed until it had seemed that suppuration was inevitable, and yet from that point a change for the better had occurred, and resolution had taken place. He regarded it as a matter of great difficulty, in many of these cases at least, to determine the exact time when pus had been formed, and in no case, therefore, would he consent to any surgical operation for the evacuation of an abscess in that region until pus had been detected by means of the aspirator. Under such circumstances the aspirator was regarded as an instrument that could render signal service, and when pus could be reached by the use of the needle, then, and not until then, should recourse be had to any surgical operation of greater severity. In the case before us a good recovery took place.

Progress of Medical Science.

REPORT OF FORTY-ONE CASES OF ANTHRAX.—Dr. Dobrzycki has met with forty-one cases of anthrax within a period of four years; thirty-six of these cases occurred during an epidemic, and the remaining five were sporadic. In most of the cases the patients had been employed about infected animals, while in some cases the flesh of these animals had been eaten. Dr. D. divides cases of anthrax into two classes: those which are produced by direct inoculation, and those through the medium of the stomach or lungs. In the former class the disease appears as a malignant pustule when the inoculation takes place on the extremities, and as a carbuncle or anthrax malignus when it takes place on the head or trunk. In the second class the disease either runs its course without local lesions, or a consecutive anthrax malignus develops. Of course the lines of distinction between the different varieties are not always sharply marked.

In these 41 cases, there were in 17 cases only, a malignant pustule, in 12 cases a primary anthrax malignus, in 8 cases a consecutive anthrax malignus, in 3 cases pustula maligna and primary carbuncle both, and 1 case ran its course entirely without local symptoms. Only six of the 41 patients died; this very favorable result being ascribed to the energetic treatment adopted in every case. All suspicious spots on the body were at once cauterized with caustic potash or the red-hot iron, the latter being the surer method; the wounds were then dressed with carbolic acid. Internally rather large doses of carbolic acid were administered, about a drachm being given in the course of twenty-four hours.

Dr. D. believes that it is dangerous to eat the flesh of diseased animals; where this has been done with impunity, he thinks it was because the flesh was taken from parts at a distance from the point of infection. —*Allgemeine Med. Central-Ztg.*, May 17th, 1876.

A CASE OF MYOSITIS OSSIFICANS.—Dr. Huth reports a well-marked case of this very rare disease. It began as a small "hardness" under the chin of a boy 20 months old. Gradually the muscles of the neck, trunk and extremities became stiff and ossified, and now the patient, who is 4½ years old, presents the following lesions: There is a small exostosis on the left parietal bone. The masseter muscles are hardened in spots; in the muscles of the neck some fasciculi are ossified in the shape of ropes or rosaries. The muscles of the thorax form a sort of bony coat of mail. On the back there are five or six exostoses the size of walnuts. The musculi lumbales are hardened on both sides; in the abdominal muscles a bony string, as thick as a finger, extends from the edge of the ribs on the right side to the pubes, while on the left side there are only a few hard nodules. Both shoulder-joints

are perfectly stiff, and the arms lie close against the trunk, but the forearms are healthy and movable. The muscles of the left hip and thigh are hard and stiff; but those of the right hip and leg are unaffected. The left thigh is fixed at a right angle to the trunk, and the left leg at a right angle to the thigh, although a little passive movement can be given to the knee-joint. The child is bound securely in a low chair, and by means of the right leg he can move himself around from one part of the room to another. With the help of a long fork he can feed himself with solid food, but all fluids must be given to him by others. It remains only to mention that no cause can be found for this affection, and that no treatment seems to be of any avail.—*Allg. Med. Central-Zeitung*, May 20th, 1876.

THE PREVENTION OF PYÆMIA IN HOSPITAL PRACTICE.—An instructive paper on this subject was recently read before the Norwich Medico-Chirurgical Society, by Mr. Cadge. It is hard to tell how prevalent pyæmia really is, for it is only in a few hospitals that accurate records are kept or reports made. In four of the London hospitals, of the deaths after major amputations, no fewer than 37.8 per cent. (!) were caused by pyæmia. Mr. Bryant tells us that forty-two per cent. of the deaths at Guy's Hospital were due to it, and Mr. Callender reports that for ten years at St. Bartholomew's Hospital it caused thirty-nine per cent. of the deaths following amputations for disease. In the Norfolk and Norwich Hospital, during the last five years, there have been thirty-two deaths from pyæmia.

Of late years, however, pyæmia has been effectually checked, and almost entirely prevented in several hospitals, and Mr. Cadge alludes to three, to show that the same object has been obtained by different methods. Prof. Lister's wards in the Glasgow and Edinburgh infirmaries, "from being about the most unhealthy in the kingdom, were converted into models of healthiness" by means of the antiseptic treatment of wounds. In the six years during which he has been surgeon to the Edinburgh Infirmary, he has had only one case of pyæmia, although his wards were dirty and overcrowded by bad cases. Saxtorph, of Copenhagen, Nussbaum, of Munich, Thiersch, of Leipsic, Volkmann, of Halle, Bardeleben and Langenbeck, of Berlin, and Von Busch, of Bonn, state emphatically that pyæmia and other septic diseases, which had previously been disastrously common in their large hospitals, have almost entirely ceased since the introduction of the antiseptic treatment.

During the five years that Mr. Callender has been attached to St. Bartholomew's Hospital, all his cases of compound fracture, sixty-six in number, recovered; of forty-nine amputations, only three died; and out of 405 operations done in the theatre, there were but three cases of blood-poisoning, and these he attributed to faulty management. These results, which are astonishing when compared with the results of the preceding ten years, were obtained by exceeding care in attending to hygienic surroundings, to the observance of strict rest, and to the absolute cleanliness of wounds; to the use of drainage tubes, and of carbolic acid dressings.

Lastly, in the Norfolk and Norwich Hospital during the year ending April 1st, 1876, there were 350 operations and wounds, but *not one* death from pyæmia or traumatic erysipelas, while during the preceding five years, pyæmia had caused thirty two deaths. This favorable change was brought about by the avoidance of over-crowding, great attention to ventilation, treating the more important operations and severe injuries in a separate building, but especially by great attention to cleanliness of the wards, bed-linen, bandages, etc., etc., and to all the details of nursing. The treatment of wounds has chiefly consisted in the free use of drainage tubes, and the application of carbolized oil on lint covered by cotton-wool, and the occasional use of the full antiseptic method. The great difficulty in carrying out this plan, is in getting the requisite number of trained nurses, and nursing superintendents.

Mr. Cadge suggests increasing the cubic space allowed to each bed to 2,000 or 2,500 cubic feet, and isolating as far as possible, all cases of severe operations or serious accidents, in single rooms, as further calculated to diminish the risk of pyæmia. He also recommends the appointment of governmental visiting boards with full powers, and that every hospital should be obliged to publish full yearly reports, with both of which suggestions the Editor of the *British Medical Journal* heartily agrees.—*British Medical Journal*, April 22d, 1876.

CARBOLIZED CATGUT IN LIVING TISSUES.—Mr. Fleming, of Glasgow, has recently performed a number of very interesting experiments in that city, with the object of ascertaining what becomes of carbolized catgut when introduced into living tissues. At first he simply inserted carbolized catgut with a needle beneath the skin of a dog's back, putting fresh pieces in new places at definite intervals of time. At the end of a month the dog was killed, and no traces of any of the pieces could be found, except in two places where abscesses, probably due to the use of a dirty needle, had formed around pieces that had only been in a few days. In his next experiments, in order to mark the position of the catgut, he twisted a bit of fine silver wire about it, but the wire prevented the cutting of thin sections. He then substituted for the wire carbolized silk, which can be closely applied to the catgut, is little altered in the tissues, seems to set up no irritation, and can easily be cut with the razor. With this he performed about twenty experiments on dogs and rabbits, in the latest experiments the animals being killed by bleeding and a two per cent. solution of Brücke's soluble Prussian blue injected into the abdominal aorta. He then cut out the pieces of catgut with some of the tissues in which they were imbedded, froze them, or hardened them in spirit, and made sections in the usual way.

Microscopical examination showed that a gradual softening takes place from without, in the catgut breaking down and becoming infiltrated with cells, probably leucocytes. This part of the process takes from five to twenty days, varying with the specimen of catgut, the tissue in which it is situated, and the age and vitality of the animal. Next, the pultaceous mass into which it has been converted is permeated with blood channels, and ultimately may be described as a cast of the catgut in a kind of granulation tissue freely supplied with blood-vessels, which in many of the specimens were very fully injected.

By the aid of these observations we can easily account for the different results obtained by the use of catgut in different hands. We see that it is in reality merely a temporary ligature, because in the softening stage it cannot be said to have any constricting effect. Whether this temporary constriction lasts long enough to produce embolic occlusion of the vessels, depends upon the sample of catgut and the vitality of the patient.—*The Lancet*, May 27th, 1876.

PELLAGRA, ITS CAUSES AND NATURE.—Dr. Winternitz, of Vienna, contributes to the *Vierteljahrsschrift*

für Dermatologie und Syphilis, an exhaustive paper on pellagra, a disease which is supposed to be confined to parts of Italy, France, and Spain, and about whose history and nature much uncertainty exists. He analyses the accounts of the disease given by Italian and French writers, and concludes that several very different and distinct diseases have been described and treated under the name of pellagra. He thinks that cases of pellagra will be less and less frequently reported, in proportion to the increase of our knowledge and skill in diagnosis. The results of treatment also show that different diseases have been classed as pellagra, mostly the diseases generated by want and misery. The so-called pellagra is characteristically a disease of the first months of the year, which is the very time when the poor suffer most from cold, uncleanliness, and want. The provisions laid in for the winter are by that time consumed, and the stomach, loaded with indigestible substances, ceases to perform its work. At the same time various eruptions of the skin result from the long-continued want of ablutions. The author closes his paper with the following conclusions:

1. Numerous diseases of the skin, bowels, and mind, and also diseases characterized by a retrogressive metamorphosis, such as scorbutus and tuberculosis, prevail everywhere where pellegra is said to be found.

2. These diseases present no local peculiarities.

3. They are excited by the same causes, and follow the same course, as in other localities, and consequently it is unnecessary to seek for any specific causes for them.

4. These different diseases have no special connection with one another, but, as in all other localities, may present numerous combinations.

5. They occur in lunatic asylums, which, until recently at any rate, did not present the best hygienic conditions.

6. In these asylums they even occur more frequently than elsewhere, which is not surprising when we consider the uncleanliness and the unhealthy food of most lunatics.

7. His experience in the Lunatic Asylum at Venice convinced him that accidental diseases of the skin and abdominal organs as often preceded as followed the insanity, and that these complications resulted only from individual conditions.

8. As a rule the cases classed as pellegra consisted of the diseases consequent on want and misery, the universally prevalent "Mali della miseria."

9. Consequently pellagra as an independent, specific disease, confined to circumscribed areas, does not exist.

10. The pathological history of *raphania maiztica*, as an independent disease, has yet to be written; it has at all events no connection with pellagra.—*Vierteljahresschrift für Dermatologie und Syphilis*, 2 Heft, 1876.

Treatment of Placenta Prævia.—In a paper on this subject, published in the *American Practitioner* for June, Dr. Parvin, of Indianapolis, advises, in conformity with the teachings of Greenhalgh and Thomas, the induction of premature labor, and expresses a belief that the mortality of both mothers and children, in cases of placenta prævia, will undergo a marked diminution when this is adopted by the profession as a rule of practice. He considers Barnes' dilators to be the safest and best means for the induction of the premature labor, and they moreover bring it on more rapidly than any other means. The vaginal tampon is difficult of application; is uncomfortable to the mother; does not remove the possibility of a dangerous internal loss of blood, and possibly may lead to a separation of the placenta and death of the child. Ergot is objectionable, except when the os is well dilated or dilatable and the labor can be speedily terminated, for the tetanic contractions it excites are apt to asphyxiate the child. Puncture of the membranes is obviously dangerous for the child, and as far as the mother is concerned is not free from danger, as it may possibly change an open into a concealed hemorrhage. Podalic version increases the risks to the child's life, and probably may be limited almost if not quite altogether to cases of shoulder presentation. Complete separation of the placenta, as advised by Sir James Simpson, is a method which ignores the child's interests, and has never received any general professional support. Finally the partial detachment urged by Dr. Barnes does not seem to be a rational mode of treatment, for it simply increases the bleeding surface.

New Treatment for Tricophyton.—At the meeting of the *Société Médicale des Hôpitaux*, on May 26th, M. Laillier read, in the name of M. Lespian, a paper on the treatment of parasitic and non-parasitic affections of the skin. In 1875, while stationed in the Pyrenees, M. Lespian saw a number of dogs that were suffering from a parasitic affection that bore considerable resemblance to tinea: scaly cutaneous eruptions, the hairs glued together and breaking off close to the roots, and slaty color of the skin. His own two dogs were affected, and on microscopical examination he found almost always spores. Within a short period, thirty-four persons, twenty-eight children and six adults, were affected with the same disease, the parts affected being those that are most frequently in contact with the hands. The treatment employed by M. Lespian consisted in painting with the following mixture: R. Tannin, grs. xv.; tincture iodine, ʒ iiss.; glycerine, ʒ v. M. When the disease was not very extensive, two applications daily for four days generally produced a cure. Pre-existing crusts were softened by the application for twenty-four hours of wads of cotton wadding or charpie soaked in olive oil or glycerine. M. Lespian has sometimes seen fever, ptyalism, and laryngismus occur during the treatment, which probably resulted from iodism.—*La France Médicale*, May 31st, 1876.

Incontinence of Urine.—Mr. Brenchley writes to the *Practitioner* that he has seldom seen much good done in the above disease by belladonna, iron, or bromide of potassium, but has met with much success with the following combination of ergot and iron:

R. Tinct. ergotæ..... ....℥ x.
Tinct. ferri. perchloridi.....℥ v
Spt. chloroformi.....℥ v.
Infus. quassiæ.....ad ʒ i. ter die sumend.

Esmarch's Bandage for Chronic Ulcers.—Dr. Turney, of Ohio, has employed this bandage in seven cases of ulcers of the leg, one a typical indolent ulcer, with indurated edges, over the internal malleolus of a woman over eighty-five years of age. In six cases the cure was rapid and permanent; in one a portion of the cicatrix gave way, but it was again progressing favorably when the patient disappeared. The bandage was applied firmly from the foot to the knee, once a day, and allowed to remain as long as it could be borne, about ten or fifteen minutes. No other treatment was employed. With each application oxygenated blood takes the place of a fluid unfit for nutrition; the strong pressure effectually overcomes the passive congestion and œdematous infiltration, and the distended vessels, completely relieved of their load of vitiated blood, have an opportunity to recover their lost tonicity.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, August 5, 1876.

COTTAGE HOSPITALS.

Mr. James W. Beekman, one of the Governors of the New York Hospital, and chairman of a committee to report on the practicability of founding a village of cottage hospitals, has presented a very elaborate contribution* to the subject, which deserves the thoughtful consideration and careful study of every one interested in hospital construction.

In our recent articles upon hospital construction and organization, we took occasion to urge the establishment of cottage hospitals; and it is with a feeling of congratulation that we can add the influence of this distinguished gentleman to the advocacy of the principles involved. A careful examination of the subject in all its varied aspects, has caused him to arrive at conclusions which commend themselves with the force of conviction to every candid observer.

He commences his report with the following startling, yet truthful, statement:

"That in all the hospitals whose records have been preserved, it is found that, although the art of surgery has made great progress, no improvement in the cure of patients has been attained—the average mortality after operations remaining unchanged for thirty or forty years; and that in small and separate hospitals the mortality diminishes with the size of the building. In the treatment of disease the same rule holds true; the nearer the condition of the patient approaches that of a member of a well-ordered household, the better are the chances of his recovery. The most successful hospital, therefore, will be a cottage; and the best general infirmary will be a village of such cottages, surrounded by gardens and not bare of trees. Pure air is the first necessity. Great cities have been supposed to require great hospitals in their midst, so as to receive the large number of sick and maimed persons who seemed likely to require instant relief. In fact, however, it turns out that the patients who are produced by a great city are wonderfully few."

Taken in connection with the fact that the Board of Governors have nearly completed a costly edifice, for hospital purposes, several stories high, in the heart of the city, and on the verge of what was once a swamp, the remarks have a bearing which is at once important and significant.

Appreciating the fact that this statement might be the subject of much criticism on the part of those who from prudential and conscientious motives, might be disinclined to believe it, Mr. Beekman has fortified it with an array of facts which are hardly open to question.

The statistics of Dr. Farr, the Registrar-General of England, are presented, to show that "the mortality of the sick who are treated in large general hospitals of populous towns is twice as great as the mortality of the sick who are treated in small hospitals in small towns." The remarkable statements of Mr. Erichsen, Prof. Tyndall, and the late Dr. Parkes, are also given to show the influence which the so-called "disease dust" accumulating in these large charities has in producing pyæmia, erysipelas, puerperal fever, and other hospital diseases. The experiences of the Lincoln County, and Norwich and Norfolk Hospitals are also quoted, showing how impossible it is to eradicate disease germs when the circumstances of long saturation has given them a home within the walls.

The most remarkable and interesting part of the report is that which gives the comparative mortality of cases treated in large hospitals, and those cared for outside, either in the homes of the patients or in small rural establishments. By comparing the death rate of dispensary practice with that of the mortality of hospital patients, he concludes that the latter is two and a half times greater than the former—a fact which can hardly be explained on the score of better accommodations than are to be found in well-regulated institutions. That the number of beds in a given hospital has much to do with the increase of mortality, Mr. Beekman presents the following table, for the correctness of which he vouches:

	PERCENTAGE OF DEATH RATE.
In British hospitals with 300 to 600 beds,	41 in 100 die.
" " with 300 to 201 "	30 " "
" " with 200 to 101 "	23 " "
" " with 100 to 26 "	18 " "
" " with 25 beds or less	14 " "
In isolated rooms in country practice	11 " "

Bearing upon the same question, he quotes the following from Sir J. Y. Simpson's work on Hospitalism:

SIZE OF HOSPITAL.	DEATH RATE.	PER CENT.
1st Series.—In large and metropolitan British hospitals, containing from 300 to 500 beds or upwards, out of 2,089 limb amputations		
855 died, ...	or 1 in 2.4	41
2d Series.—In provincial hospitals, containing from 201 to 300 beds, out of 803 limb amputations		
228 died	or 1 in 3.5	29

* Report of the Committee on a Village of Cottage Hospitals made to the Governors of the Society of the New York Hospital, 1876.

SIZE OF HOSPITAL.	DEATH RATE.	PER CENT.
3d Series.—In provincial hospitals, containing from 101 to 200 beds, out of 1,370 limb amputations 301 died.....or 1 in	4.4	23
4th Series.—In provincial hospitals, containing from 26 to 100 beds, out of 761 limb amputations 134 died.....or 1 in	5.6	18
5th Series.—In provincial hospitals, containing 25 beds or under, out of 143 limb amputations 20 died.....or 1 in	7.1	14
6th Series.—In British private country practice, where the patients operated on lay in single or isolated rooms, out of 2,098 limb amputations 226 died.....or 1 in	9.2	11

It is well known that the arrangements of our general hospitals, during the last war, carrying out as they did the cottage plan, gave a low rate of mortality, which was a matter of astonishment to every one.

Mr. Beckman's report, being, for the most part, statistical in character, does not admit of a very detailed presentation on such anoccasion as this; but we believe we have given enough to show the nature and drift of his argument in favor of cottage hospitals, and to appreciate the force of his conclusions.

Believing as he does, in common with many others, that a collection of cottages in the country is the surest means of decreasing the mortality in hospitals, he recommends a plan which is calculated to meet the end in view. It is, in brief, that cottages should be erected out of town, within convenient access to it by rail or steamboat. Although the idea is somewhat Utopian, the difficulties in the way of the accomplishment of the design are not insurmountable. The arguments in favor of large hospitals, are convenience of administration and accessibility, but these are counterbalanced by decrease in mortality, by the present facilities of transportation, and by the comparative cheapness of smaller establishments. In a large city like New York, a few miles out of town by rail or steamboat would not involve more time in travel than would be consumed in the ordinary trips made by the horse-car. To the patient the dangers of transportation would not be so great, jolted over cobble stones for miles, as in an easy ambulance car or river transport.

In regard to the question of economy, Mr. Beckman very significantly suggests:

"That in this case duty and profit go together. The cheapest way is the best in all ways. We need cheap—not large—buildings, ample space of ground, with abundance of pure drinking water, and some trees. The difference between the capital sum which would be "fixed" and absorbed in constructing a large infirmary in town, and the amount of money which would suffice to pay for and equip a village of cottage wards in the country, will support generously out of its income, when invested, a large number of free-beds."

While we believe the cottage plan of hospital arrangement, as suggested by Mr. Beckman, would be the best, we cannot afford to do without smaller reception houses in different parts of the city. These also could be maintained at small expense, and could be, from time to time, changed as circumstances demanded. As we have always been in favor of having the cottage plan thoroughly tried, we cannot but hope that the wealthy Society of the New York Hospital will heed the suggestions of the writer of the report, and give them the practical turn which is so desirable.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, June 14, 1876.

Dr. C. K. Briddon in the Chair.

TUMOR OF INTESTINE—BRIGHT'S KIDNEY, ETC.

Dr. John H. Hinton presented specimens consisting of the kidneys, with portion of intestine and omentum attached, which had been removed from the body of a man aged sixty-one years. The point of interest connected with these was the singular absence of symptoms during life pointing to the existence of the grave renal disease which was the immediate cause of death. The patient, although not robust, enjoyed a reasonable amount of health, and was able to attend to his business as a financier until three weeks before his death. At that time he first began to complain of the effects of constipation, although he had been suffering from this latter condition during the greater part of last winter. When Dr. Hinton first saw him his attention was called to a tumor in the right iliac region. This was about the size of the fist, midway between the anterior spinous process of the ilium and the umbilicus; was quite firm in consistence, irregular and nodular in outline, and freely movable. The dullness on percussion over this tumor was quite marked, and was in striking contrast to the tympanitic résonance above, occasioned by the accumulation of gas in the large intestine. This latter fact, together with the existence of the tumor in that locality, and the obstinate constipation, gave rise to the suspicion of an organic lesion of the colon. The character of this growth was only surmised. The only prominent subjective symptoms were nausea and pain at the seat of the tumor, colicky in character, and evidently due to the imprisonment of flatus. These distressing symptoms continued, and were only mitigated by opiate injections. There was no change in his symptoms until thirty-six hours before death, when suppression of urine occurred, with slight uræmic symptoms. The uræmia was not by any means well pronounced, the patient being perfectly rational until within three hours of his death. With the suppression there was a coincident cessation of nausea, apparently due to the anodyne effect of the uræmia. The suppression was almost complete, only six ounces of urine being drawn from the bladder during the last thirty-six hours. Death occurred quietly, without coma, and was due apparently more to the exhaustion than to the more direct influence of the

kidney trouble. The advent of uræmia created the first suspicion of kidney disease, and it was not until then that the urine was examined. It was found albuminous, but not markedly so.

The autopsy was made ten hours after death. On opening the abdomen there was no general peritonitis, but local peritonitis was found at the site of the tumor. These adhesions existed between the omentum and intestines, at the ileo-cæcal junction, and extended, although in a slight degree, to the peritoneum of the iliac fossa. The tumor itself was, as previously stated, about the size of the fist, and consisted of a deposit in the substance of the intestinal walls of the ileum, the mucous membrane being but slightly involved; there being but one or two small points of ulceration on the surface of the latter, with limited softening of the submucous tissue. Two and a half inches of the circumference of the ileum were involved, producing a stricture capable of admitting merely the tip of the little finger, and presenting the appearance of an intestinal sphincter at that point. The growth was eccentric rather than concentric. The mesenteric glands were enlarged and infiltrated, and there were also nodules in the omentum. The kidneys showed evidences of old croupous nephritis, with the attendant surface depressions.

At the time of presentation there had been no microscopical examination of the tumor, although from its gross appearances it was evidently cancerous in character.

RHINOPLASTY—PAPILLARY EPITHELIOMA.

Dr. Briddon presented photographic representations of an operation for rhinoplasty at the Presbyterian Hospital, accompanied with the following history by Dr. W. E. Forrest, of the House Staff:

Edward Mauer, aged 33, baker, admitted April 27, 1876. The patient entered the hospital with a tumor on the nose. This commenced as a small pimple four months ago, while the patient was convalescing from a severe attack of variola. It has grown quite rapidly, without pain, and at present is nearly one inch and a quarter in diameter. The tumor is a flattened, circular growth, with elevated edges and a rough papillary surface, presenting all the external appearances of an epithelioma.

The tumor extends from near the root of the nose half way to the tip, covering the dorsum; more of it lying on the left side than on the right side of the nose. Operated on April 28th.

The patient was put under ether, and four incisions made through the sound integument, a quarter of an inch from the edge of the tumor, so as to enclose the tumor in a quadrangular-shaped flap. This piece was carefully dissected off, leaving an exposed surface extending transversely across the nose to its junction with the face, and extending along the dorsum two-thirds of the way to the tip. Then a flap, previously marked out, was dissected from the forehead. This flap extended obliquely upwards and towards the left, was two and a quarter inches in length by two inches in breadth at its upper end, and was left attached by a pedicle to the forehead at the inner end of the right eyebrow. An hour afterwards, when all hemorrhage had ceased, the flap was brought down and stitched into the space from which the tumor had been removed. The lips of the wound on the forehead were approximated by pins and adhesive strips.

April 29.—The patient lost considerable blood during the operation, and did not recover very well from the ether. The circulation in the flap is good and the swelling moderate.

April 30.—The sutures were removed and the flap found to have united throughout most of its extent by first intention. The face is somewhat swollen and has an erysipelatous blush.

May 1. The whole face is much swollen, the eyes closed, and the swelling extending downwards. There is some discharge from beneath the flap, and a very small portion of the lower right corner of the flap has sloughed; the rest is warm. Temperature 104°, pulse 130. The patient was promptly removed to the pavilion, and put upon the treatment for erysipelas.

May 6.—The patient has nearly recovered from the attack of erysipelas. The flap has maintained its vitality and its adhesions. The wound on the forehead is filling by granulation.

May 25.—The patient has returned to the hospital after a two weeks' visit at his home. The flap is healthy and has grown quite large and thick. To-day the pedicle attaching it to the forehead was cut, and an elliptical piece from the side of the new portion removed so as to reduce its size. The edges were brought together with horse hair sutures. On pricking the flap the sensation was referred both to the forehead and to the nose.

After which the Society went into Executive Session.

Correspondence.

INCISION OF THE CERVIX UTERI FOR THE CURE OF DYSMENORRHŒA.

To The Editor of the Medical Record.

Sir:—In your report of the stated meeting of the New York Academy of Medicine for June 1, 1876, I find a pretty full abstract of a paper read by Dr. E. R. Peaslee, some of the statements of which will scarcely be accepted without criticism by practical gynæcologists. While, theoretically, Dr. Peaslee's paper may be regarded as an excellent analysis of the literature of operations for dysmenorrhœa, it seems to me to be misleading as to the feasibility of the operations from which he dissents, and hence of very little value to the practitioner, who must submit his theories to the test of facts. One fact in physiology is worth pages of ratiocination; and it so often happens that our cleverest theories break down in the presence of a test case, that I, for one, in growing gray with the problems of practical surgery, have also grown wary of expressing opinions based upon review of medical literature. In my own operations for dysmenorrhœa, whether proceeding from anteflexion or from stenosis, or both, hemorrhage is about the last thing to give any serious trouble, and conception subsequent to the operation is as frequent as the average among women who have never submitted to the knife; so that I should be wanting in frankness, and in regard for real progress in surgery, if I should neglect to say that I consider Dr. Peaslee's objections to be, in the main, purely speculative, and hence, although ably argued, very unreliable as guides to the practitioner. I have, for instance, generally found the womb resuming its natural position after incision of the cervix, without special manipulation. It is, as I have observed further on, from the case-books of practical surgeons that a true science of surgery is to be constructed. There is nothing so dangerous as a knife in the hands of a blunderer, even in the simplest operation; and nothing safer, even in the most complex operation, than the

same instrument in the hands of a real surgeon, guided by judgment and mature experience. The difficulty is, that your inveterate theorist is rarely dexterous and experienced of hand, and finds his proper function as a professor rather than a practitioner. With these preliminary observations, I will proceed to my own record of cases.

H. K. W. Dysmenorrhœa and sterility. Operated by incision of the cervix posteriorly up to the vaginal junction, and three incisions, one central anterior, and two lateral oblique, each one-eighth of an inch in depth, through the os internum. Used a modification of Civiale's urethrotome, by means of which the depth of the incision can be gauged accurately. The general result was, of course, to convert the anteflexed cervix into a straight canal, longitudinally continuing the body of the womb. Introduced a straight section of laminaria, and retained it in position for five days by packing below it with cotton. The incision healed kindly. Has not since been pregnant.

Mrs. S. J. S. Operated in the same manner as before for dysmenorrhœa and sterility. Patient has not since been pregnant, although the dysmenorrhœa was cured.

Mrs. H. Dysmenorrhœa and sterility. Operated in the same manner. Has since been pregnant and safely delivered at full time.

Mrs. V. Dysmenorrhœa and anteversion. Operated with Simpson's uterotome. Dysmenorrhœa cured. Not pregnant since the operation was performed.

Mrs. G. Anteflexion and sterility. Operated with Simpson's instrument. Dysmenorrhœa cured. Patient left the city soon after the operation was performed, and I have no means of knowing whether she has since been pregnant.

Mrs. W. Anteflexion and dysmenorrhœa. Operated with Simpson's instrument, with perfectly satisfactory results. Present residence of the patient unknown to me, and cannot, therefore, state whether she has since been pregnant.

Mrs. G. Amputated the whole cervix. Hemorrhage was not troublesome. Patient became pregnant a few months after the operation, and was safely delivered after the full period of gestation.

Mrs. M., of Yonkers, N. Y. Anteflexion, dysmenorrhœa, sterility. Incision of cervix with Simpson's instrument. No hemorrhage. Dysmenorrhœa cured.

Mrs. H., widow. Dysmenorrhœa. Same operation. No serious hemorrhage.

Mrs. B. Dysmenorrhœa from anteflexion. Operated by incision with Simpson's curved uterotome. Cured.

Mrs. H. Dysmenorrhœa and sterility from anteflexion. Operated with Simpson's instrument, by incision. Has been pregnant three times, without any symptoms of miscarriage.

Mrs. M. Dysmenorrhœa and sterility from anteflexion. Incision of cervix. Four pregnancies since, without symptoms of miscarriage.

Mrs. L. Dysmenorrhœa from anteflexion. Incision of the cervix. Since pregnant, and safely delivered after the full time. No symptoms of miscarriage.

Mrs. C. Dysmenorrhœa and sterility from anteflexion. Incision. Case cured. Not since pregnant.

Mrs. C. Vaginismus, dysmenorrhœa and anteflexion. Dissected out the hymen after the manner of Dr. Sims, and operated by incision with Simpson's instrument. Patient cured, but whether she has since been pregnant I have no means of knowing, as she removed from the city soon after.

Mrs. C. Sterility and dysmenorrhœa from anteflexion. Incision as described in case of H. K. W. Case cured. No pregnancy.

Mrs. D. Dysmenorrhœa and sterility from anteflexion. Operated with modification of Civiale's urethrotome, as described in case of H. K. W. Three successful pregnancies since.

Mrs. E. Sterility, dysmenorrhœa, anteflexion, and uterine catarrh. Incision as described in case of H. K. W. Twice pregnant, without symptoms of miscarriage.

Mrs. E., of Texas. Dysmenorrhœa, sterility, anteflexion, and uterine catarrh. Operated by incision with Civiale's urethrotome. Case cured. No means of ascertaining whether patient has since been pregnant.

Mrs. F. Anteflexion and dysmenorrhœa. Same operation. Since pregnant, without symptoms of miscarriage.

Mrs. G. Dysmenorrhœa, anteflexion, vaginismus, and sterility. Dissected out the hymen, and operated by incision of the posterior wall of the cervix and os internum, as described in case of H. K. W. The two operations were not, of course, performed without the proper interval between them. Case cured, but so recent as to render the question of pregnancy one only to be decided by future events.

Mrs. F. Anteflexion and dysmenorrhœa. Operated as in preceding case. Have no means of ascertaining whether patient has since been pregnant.

Mrs. G. Anteflexion and dysmenorrhœa. Same operation. Case cured Not pregnant when last heard from, which was some years ago, and but a few weeks after the operation.

Mrs. H. Anteflexion and dysmenorrhœa, sterility of course. Operated by incision of cervix and os internum, with my modification of Civiale's urethrotome. Cured the dysmenorrhœa, but not the sterility.

Mrs. H. Anteflexion and dysmenorrhœa. Operated as in preceding case. Has been pregnant three times since, and gone the full time without symptoms of miscarriage.

Mrs. W. Anteflexion, dysmenorrhœa, and uterine catarrh, for which she had previously suffered a tedious treatment. Same operation as in preceding case. Cured, but has not since been pregnant.

Mrs. W. Anteflexion and dysmenorrhœa. Operated by incision, with modification of Civiale's instrument. Cured, but not since pregnant.

Mrs. I Anteflexion and dysmenorrhœa. Incision of cervix and os internum. Case cured. Very recent.

Mrs. R. Anteflexion and dysmenorrhœa. Incision of the cervix. Since pregnant, and went full time without symptoms of miscarriage.

Mrs. R. Anteflexion and dysmenorrhœa. Incision of cervix and os internum. Operated by incision, with some subsequent trouble, though not enough to occasion any anxiety, the patient having taken the liberty of removing the packing of cotton and the laminaria.

Mrs. R. Anteflexion and dysmenorrhœa. Operated by incision. Case cured, but no subsequent pregnancy.

Mrs. R. Dysmenorrhœa in consequence of stenosis. Operated by incision. Not since pregnant. In this case there was also a fibroid tumor of the os internum, which had to be broken down by repeated incisions to the centre. Well as ever, with the exception of not having become pregnant.

Mrs. S. Anteflexion and dysmenorrhœa. Incision of the cervix. Since pregnant and safely delivered at the expiration of the full time.

Mrs. V., after incision of the cervix for dysmenor-

rhœa and sterility, has been pregnant three times, and gone the full period without symptoms of miscarriage.

Mrs. W. Anteflexion, dysmenorrhœa, sterility. Addicted to opium. Incision. Case cured. Not since pregnant.

Mrs. W., of East New York. Anteflexion and dysmenorrhœa. Incision. Case cured.

Mrs. M. Anteflexion and dysmenorrhœa. Incision. Dysmenorrhœa cured. Still under treatment.

Such thorough confidence have I in incision of the cervix uteri, when carefully performed, that I employ it almost invariably in virginal cases, in which it is important not to rupture the hymen, and hence the use of the speculum is impracticable. No man can be a successful surgeon who, whatever his theoretical acquirements, has not learned to see with the tips of his fingers. A few of these cases, as they bear upon Dr. Peaslee's papers, I will copy from my case book.

Miss D., twenty years of age. Anteflexion and dysmenorrhœa. Under chloroform to full anæsthesia I found the hymen sufficiently relaxed to be distendible. Introduced the double tenaculum into the os externum, straightening the cervix in such a manner as to admit of the introduction of a pair of curved probe-pointed scissors, guiding them carefully along the passage with the previously introduced index finger, so as to avoid laceration, and trusting the retention in place of the double tenaculum to the hand of an assistant. In this manner I slit the posterior portion of the cervix up or near to the vaginal junction, say within a line of it. Withdrawing the scissors, I next introduced my modification of Civiale's instrument, which can be adjusted to any exact depth of incision, through the os internum, and made one longitudinal incision through the tissue of that body, a line and a half in depth. Next, closing the blade and passing the instrument further up, I made an incision of forty-five degrees in obliquity along the right wall, and another on the left. The three incisions being sufficient to insure considerable dilatation of the cervix, the next step was to introduce a tent of laminaria, the expansion of which would keep the passage enlarged. I removed the tent, as usual, at the end of five days, cleansed the wound with carbolic acid water, and redressed the incision, using chloroform, which, in addition to its anæsthetic value, has the special property of relaxing muscular fibres to such an extent as to admit of considerable enlargement of the passage, without danger of rupturing the hymen. After the incision is healed, I have of late found great advantage in using the bifurcated stem pessary, which contributes to retain the cervix in position until the muscles have fully recovered their tone.

Miss H., nineteen years old. Anteflexion and dysmenorrhœa. Operated under full anæsthesia as in preceding case. Hymen not ruptured. Case cured.

Miss H., sister of preceding, twenty years old. Anteflexion and dysmenorrhœa. Same operation. Case cured without rupture of the hymen.

Miss J., twenty three years old. Operated as before, without rupturing the hymen. Patient married soon after, and has been twice pregnant. In consequence of albuminuria, dropsy, and spasms, she was artificially delivered of the first at the end of seven months. The second was carried the full term without symptoms of miscarriage.

Miss M. Anteflexion and dysmenorrhœa. Incision under full anæsthesia, without rupture of the hymen.

Miss R., twenty-two years old. Anteflexion and dysmenorrhœa. Incision, as in preceding cases. Since married. Has been twice pregnant, and gone the full time without symptoms of miscarriage.

Miss N. Dysmenorrhœa. Same operation, without rupture. Case cured.

Miss R. Dysmenorrhœa. Operated in the same manner, although the hymen was partly ruptured before the treatment commenced. Case cured.

Miss R., sister of the two Misses R. immediately preceding. Dysmenorrhœa and anteflexion. Catamenia were accompanied with spasms every month. Operated with dilating forceps, and introduced the bifurcated stem pessary. As showing the advantage of incision of the cervix, this case has not been successful.

Miss R. Anteflexion and dysmenorrhœa. Operated by incising the cervix as previously described, without rupturing the hymen. Since married, and lately delivered at the full time. No symptoms of miscarriage.

Miss B., eighteen years old. Operated with dilating forceps, under full anæsthesia. Since married and pregnant.

Miss M., nineteen years old. Operated with dilating forceps. No rupture. Case cured.

Miss M., twenty-eight years old. Operated by incision. Case cured without rupture of the hymen.

Miss D. Dysmenorrhœa. Incision under full anæsthesia. Case cured without rupturing the hymen.

In all these cases the incision has been substantially the same, namely, a longitudinal cut of the cervix up to the vaginal junction, and three incision of the os internum, each a line and a half deep, with subsequent dilatation of the cervix with laminaria, expanding in many cases to five-eighths of an inch in diameter. In every case the dysmenorrhœa and anteflexion have been cured, without any serious hemorrhage. Of these cases fifteen have been pregnant and gone the full time. Five of the virgins have since married, with seven healthy pregnancies in all, and not a single case of miscarriage has occurred from inability of the incised cervix to carry the full time of fœtal development. One had premature labor from albuminuria, dropsy and convulsions; and, with the assistance of Dr. Charles Budd, hypodermic injections of ergot, and the forceps, the mother was saved to be healthily pregnant soon after.

I will not trouble the readers of a medical journal with any theoretical discussion of Simpson's operation or the special features introduced by Sims. In surgery, success is the test of merit in every operation, and it is only by a careful analysis of the case-books of practical men that the young practitioner can learn to distinguish between real science and cleverly expressed theory; and I shall, therefore, hope to see the MEDICAL RECORD open its columns to transcripts from the case-books of practical gynæcologists, with a view to contribute to the materials for scientific exactness. I cannot forbear observing, however, that Dr. Peaslee's view rests upon a radical misconception of the part played by the cervix uteri in successful pregnancy. It is not the cervix proper, but the special muscular portion, consisting of circular fibres, at the vaginal junction, that retains the developing embryo. The lower portion is redistributed, and becomes part of the uterine integuments as that organ expands during the progress of gestation, in such a manner that cicatrices of considerable magnitude are completely obliterated by a single pregnancy.

In a recent virginal case, the patient, Miss B., of this city, had anteflexion with stricture of the os internum. Age twenty five years. Hymen unruptured. In delicate health and considerably emaciated. Placing her under the full influence of chloroform, which is very superior to ether as a muscular laxative, and tends

to the reduction of hemorrhage by suspending the *vis a tergo* of the heart, I introduced the index finger of the right hand and passed up a single tenaculum, drawing the os internum downward. Entrusting this to an assistant, I next replaced the single tenaculum with a double one, which I inserted into the cervix, depressing it as far as practicable, and entrusted it to the asssistant. Then, with the right hand I passed in a curved pair of probe-pointed scissors, one blade of which entered the os and cervix, the other remaining posteriorly without, and incised the latter up to the vaginal junction, so as to straighten the canal from above downward. The index finger of the right hand must be the guide in making this incision, and great care must be taken to keep it within due limits. Still retaining the double tenaculum, I next widened and straightened the uterine canal, by introducing into the os uteri internum, and a little beyond it, a concealed uterotome, and making three incisions into the os internum, which is done by withdrawing the guarded blade open, and returning it shut. Of these incisions one was downward anterior, three-fourths of an inch long, and a line and a half deep, and the other two were lateral oblique. A section of laminaria, sustained with a packing of cotton, completed the operation. The hemorrhage was trifling. The laminaria must be occasionally introduced during the progress of the healing, to prevent contraction of the incisions of the os internum. Case cured, without rupture of the hymen.

Yours, very respectfully,

JOSEPH WORSTER, M.D.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from July 23d to July 29th, 1876.

MILHAU, J. J., Surgeon. Leave of absence extended to October 1, 1876, and his resignation accepted by the President, to take effect Oct. 1, 1876. S. O. 148, A. G. O., July 21, 1876.

BACHE, D., Surgeon. Assigned to duty at Angel Island, Cal. S. O. 73, Dept. of California, July 19, 1876.

TILTON, H. R., Asst. Surgeon. To proceed to mouth of Big Horn River, M. T., and report to Brigadier-General Terry for duty with his command in the field. S. O. 88, Dept. of Dakota, July 22, 1876.

HORTON, S. M., Asst. Surgeon. Assigned to duty as Post Surgeon at Fort McHenry, Md. S. O. 143, Division of the Atlantic, July 28, 1876.

MCELDERRY, H., Asst. Surgeon. Granted leave of absence for two months. S. O. 148, C. S., A. G. O.

LIPPINCOTT, H., Asst. Surgeon. Assigned to duty at the Military Academy, West Point, N. Y. S. O. 148, C. S., A. G. O.

GIRARD, A. C., Asst. Surgeon. Granted leave of absence for six months, with permission to go beyond sea, to take effect when relieved by Asst. Surgeon Lippincott. S. O. 148, C. S., A. G. O.

GIRARD, J. B., Asst. Surgeon. Granted leave of absence for one month. S. O. 152, A. G. O., July 27, 1876.

PRICE, C. E., Asst. Surgeon. Assigned to duty at Camp Bidwell, Cal. S. O. 73, C. S., Dept. of California.

WORTHINGTON, J. C., Asst. Surgeon. To report to Commanding Officer Dept. of Arizona for assignment to duty. S. O. 150, C. S., A. G. O.

SPENCER, W. G., Asst. Surgeon. Granted leave of absence for one month. S. O. 106, Dept. of the South, July 27, 1876.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending July 29, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
July 22.....	0	6	21	3	13	25	8
July 29.....	0	12	8	2	6	36	2

KAKE, OR THE BERI-BERI OF JAPAN.—Dr. D. B. Simmons, of Yokohama, Japan, writes:—"The disease known by the native name of Kake, which has appeared in an epidemic form in the large seaport towns of this country, for the past four years, is beyond a doubt the Beri-beri of India and the Mid-Oceanic Islands.

"The ætiology and pathology of the latter is acknowledged by all writers on the subject to be exceedingly obscure.

"In the investigation of the Japanese disease, we have been able to settle beyond a doubt some important points, which we believe opens a new era in the progress of our knowledge of this subject. We shall refer to the one only at this time which appears to us the most important, viz., *an acute atrophy of the muscles, caused by an amyloid degeneration of their contractile elements.* This fortunately affects certain groups only, and is the true cause of the tedious paralysis which is a leading symptom of this disease. We have in the course of preparation a complete review of the subject, which we hope to complete within a short time."

POWDER TO PREVENT PITTING AFTER VARIOLA.—Dr. Pennavaria, of Ragusa, has succeeded in preventing pitting in several cases of variola by the use of a powder composed of four parts of flower of sulphur and one part of red precipitate. He was led to use it by the success he had had with it in eczema and acne. A thin layer of glycerine is first spread over the pustules as soon as they have reached the period of suppuration, and the powder is dusted over it. The glycerine secures the adhesion of the powder, which causes desiccation and the formation of a crust, and when this falls the skin is exempt from cicatrices.

UNIVERSITY OF MICHIGAN.—The Regents of this University, at a recent meeting, made two new appointments of professors in the Homœopathic College.

INTERNATIONAL MEDICAL CONGRESS, PHILADELPHIA, SEPTEMBER 4–9, 1876.—The International Medical Congress will be formally opened at noon on Monday, the fourth day of September. The sessions of the Congress and of its Sections will be held in the University of Pennsylvania, Locust and Thirty-fourth streets. The General Meetings will be held daily, from 10 to 1 o'clock. The Sections will meet at 2 o'clock. Luncheon for members of the Congress will

be served daily in the University building from 1 to 2 o'clock. On Wednesday evening, September 6th, Dr. J. J. Woodward, U. S. A., will address the Congress on the Scientific Work of the Surgeon-General's Bureau. The Public Dinner of the Congress will be given on Thursday evening, September 7th, at 7 o'clock. The registration book will be open daily from Thursday, August 31st, to Saturday, September 2d, inclusive, from 12 to 3 P. M., in the Hall of the College of Physicians, N. E. corner of Thirteenth and Locust streets, and at the University of Pennsylvania on Monday, September 4th, from 9 to 12 M., and daily thereafter from 9 to 10 A. M. Credentials must in every case be presented. Letters addressed to the members of the Congress, to the care of the College of Physicians, N. E. corner Locust and Thirteenth streets, Philadelphia, during the week of meeting, will be delivered at the University of Pennsylvania. The Secretaries of State and Territorial Medical Societies are requested to forward, without delay, to the Chairman of the Committee on Credentials, I. Minis Hays, M.D., 1607 Locust street, Philadelphia, lists of their duly accredited delegates to the Congress. Delegates and visitors intending to attend the Congress are earnestly requested, individually, to notify immediately the same Committee. This information is desired to facilitate registration, and to ensure proper accommodation for the Congress. Members intending to participate in the public (subscription) dinner of the Congress will please notify the Secretary of the Committee on Entertainment, J. Ewing Mears, M.D., 1429 Walnut street, Philadelphia. Gentlemen intending to make communications upon scientific subjects, or to participate in any of the debates, will please notify the commission before the 15th of August.

International Medical Congress at Philadelphia.—The Epidemiological Society of London has chosen Dr. Edwin Howard as its delegate to the Congress. The Obstetrical Society of Dublin has elected Dr. T. More Madden. Profs. Nicolaysen and Hjort have been elected delegates by the Norske Medicinske Selskab.

Death of Dr. L. De Forrest Woodruff.—At a special meeting of the Medical Board of Charity Hospital, held July 13th, 1876, the following Resolutions were adopted:

Whereas, our Colleague, Dr. Lockwood De Forrest Woodruff, has been removed from our number while in the performance of his duty, therefore

Resolved, That in his death, the Hospital has lost the services of one who was earnest in its interests and vigilant in all that pertained to its honor and usefulness.

That his death, contracted in the Hospital service, was a sacrifice that this Board honors as typical of the lofty professional spirit which he so eminently embodied.

That we shall miss the companionship, aid, and counsel of one who was thus, in all the qualities of physician, colleague, and friend, pre-eminent.

That we mourn with his family, while with them we bow to the wisdom of the Providence that has summoned him from our midst.

Le Roy M. Yale, M.D., *President.*
Frederick R. S. Drake, *Secretary.*

Dr. R. D. Arnold, of Savannah, Ga., one of the founders of the American Medical Association, and one of the committee who framed the Code of Ethics, died July 19th, of phthisis pulmonalis, in the sixty-eighth year of his age.

William R. Warner & Co.—The prize medal at the Chilian World's Fair, was awarded to Messrs. William R. Warner & Co., of Philadelphia, for the superiority of their sugar-coated pills.

Hirschfeld.—*Le Monde Russe* announces the death of M. L. Hirschfeld, the eminent anatomist, at Varsovia, on the 28th of April. M. Hirschfeld was born at Varsovia in 1814, and prosecuted his studies in the Universities of Breslau, Berlin and Paris.

Judgment against an Apothecary.—An apothecary and his clerk have recently been condemned, in Paris, to one month's imprisonment, and to pay $10 fine and $400 damages, for a mistake in filling a prescription. Arseniate of soda, a very violent poison, was given in mistake for phosphate of soda, and the patient's health is still seriously impaired in consequence. The excuses of the pharmacist were not accepted, because he should have kept his poisons under lock and key.

Stromeyer.—The history of Stromeyer has been an eventful one: Born in 1804, he studied medicine from 1822–1826 at Göttingen and Berlin; then had a position as surgeon at the Royal Court of Hanover. In 1838 he was made professor of surgery at Erlangen, and afterwards at Munich and Freiburg. In the German-Danish war, 1848–50, he served as chief-surgeon, holding at the same time the professorship of surgery at Kiel. After giving up his academical work, he took the position of a general surgeon-in-chief (General Stabs-Arzt) of the Hanoverian army. After the German war, 1866, he retired to a most brilliant private practice at Hanover; though many honorable official offers were made to him. His numerous excellent works, mostly on military surgery, are well known. His last work, Memoir of a German Physician, Hanover, 1875, is of great value, being a criticism of the most eminent medical men and institutions of this century. Moreover, Stromeyer was the first who practised subcutaneous tenotomy, 1838. *

He died at Hanover, June 15th, of cerebral hemorrhage, while preparing himself to visit this country and institutions.

Homœopathy in the University of Michigan.—The following resolution has been adopted by the Faculty of the Rush Medical College: "*Resolved*, that the time and attendance of students upon Lectures of the Medical Department of the University of Michigan, up to, and including, the last regular session of that College, may be recognized as part of the requisites for graduation in this College; but such time and attendance shall not hereafter be accepted, so long as the teaching of Homœopathy, in whole or in part, shall be included in the course of study at that Institution."

Dr. F. K. Bailey.—Died at Knoxville, Tenn., June 17th, 1876, Dr. F. K. Bailey, in the sixtieth year of his age.

Dr. Bailey received his doctorate from Castleton Medical College, Vermont, in 1837, and began his professional career the same year, locating in Michigan, where he continued his labors for a period of twenty years, with that success which is ever an attendant upon the faithful discharge of duty. Early in the war, he

* L. Stromeyer: Beitrage zur operativen Orthopadie; Hanover, 1838.

entered the United States service, being located the greater part of the time at Quincy, Illinois, in charge of the hospital at that place. At the close of the war Dr. Bailey located in Knoxville, Tenn., where, by his assiduous attention to the duties of his profession, his untiring devotion to his patients of all classes, whether rich or poor, he won for himself that name which is rather to be chosen than great riches; and soon found himself in possession of a large and extensive practice.

Among his professional brethren his demeanor was that of the scholar, the gentleman, and the Christian; and he enjoyed the confidence, love, and esteem of all his confrères.

Dr. Bailey was a large contributor to the medical literature of the day, and as such was highly esteemed. The charming grace of his cultured pen has left an indelible record of his attainments as a learned physician; and the works that he has left, replete with wisdom and research, remain an enduring monument to his exalted worth. J. P. P.

The Archives of Clinical Surgery is the title of a new New York Monthly, edited by Edward J. Bermingham, M.D., of this city. The first number, which is before us, is full of interesting and valuable material. Routledge & Co. are the publishers. Subscription, $4.00 per annum.

Ménière's Disease treated by Quinine.—Charcot has recently given large doses of quinine—from seven to fifteen grains a day for six or seven weeks—in two cases of Ménière's disease, with the result of enabling the patients to go about with security by themselves. He was led to give it in the hope that the ringing in the ears produced by the excessive doses of quinine might deaden the subjective noises in the ears dependent upon the disease.

Two New Sources of Lead Poisoning.—In the *Gazette Méd.*, of May 6, 1876, Dr. Gibert called attention to two new sources of lead poisoning. In one case the editor of a newspaper had suffered for two years from severe gastric disturbances, the explanation of which was ultimately found in a lead line on the gums, and the supply of the poison was found in the red-lead coloring of the stamps which the patient moistened with his tongue every day in large numbers. In the second case the patient consumed so many of the little French *cachous*, such as are used by smokers, as to become poisoned by the lead in the metallic film with which they are "silvered." On chemical analysis each box was found to contain about a third of a grain of lead.

Homicidal Handwriting.—Under this heading the London *Lancet* refers to the careless manner in which physicians are in the habit of writing their prescriptions, and gives a case in point: A gentleman received a prescription for a cough, one of the ingredients of which was benzole rect. By the merest good luck the recipe was properly compounded. Some time afterwards the patient presented the same prescription to another chemist, who read the ingredient referred to as benzoli *nit.*, remarking upon the largeness of the dose. The patient assuring the compounder that he had taken the dose named, without bad effects, it was given to him. The result was that he barely escaped with his life. The *Lancet* truly says: "The whole blame of the accident must be attributed to the prescriber. The practice of relying on a particular chemist to interpret bad writing is very objectionable, and cannot be too strongly condemned. Every prescription should be legible at a glance."

The Paris Faculty and Competitive Examinations.—Several times since the abolition of competitive examinations for professional appointments in Paris, several efforts have been made to restore the concours. The last attempt in this latter direction was lost by a deliberate professorial vote.

Medical Examination of Schools.—The medical profession of Liverpool are warmly advocating the medical examination of school children, with the view of preventing the spread of infectious diseases.

The Army Medical Hospital.—The *Lancet* speaks in very commendatory terms of the Army Medical Hospital at the Centennial Fair.

Government Hospital for Insane, Washington, D. C.—Dr. Nichols, the medical superintendent, has been exonerated by the Congressional Committee from all blame concerning any mismanagement in his asylum.

Anti-vivisection in England.—The medical profession are still actively fighting the proposed Anti-vivisection Bill, notwithstanding that it has been discovered that a goodly number of physicians openly oppose the action of their brethren.

Death of the ex-Sultan.—Dr. E. D. Dickson, physician to the British Embassy, Constantinople, reports, in the *British Medical Journal*, the circumstances connected with the death of the ex-Sultan. It seems that his Majesty had been suffering for a long time with mental hallucinations. These were so strongly marked towards the end of his life that every weapon with which it was thought he might injure himself was carefully taken from him. On the morning of his death he asked for a scissors to trim his beard. This demand was referred to his mother, who, little thinking what use he was going to make of them, sent him her own scissors and a hand mirror. The scissors were small and very sharp. On receiving these things he sent all his attendants (females) out of the room, and put an end to his existence by cutting the blood-vessels in his arms. "The direction of both of the wounds was oblique from above downwards and from within outwards, and their edges were jagged. That in the left arm was deep. I passed my forefinger into it down to the very joint. The skin, the superficial veins, and the deep-seated tissues were cut through, and the ulnar artery laid open but not entirely divided. The wound in the right elbow-joint was superficial, cutting only across the skin and superficial veins. No other injury whatever was discovered on his person."

Dr. Ernst Leyden, Professor in the University of Strassburg, has been appointed to fill the vacancy in the University of Berlin caused by the death of Professor Traube.

Cremation.—A Congress of the supporters of cremation was held at Dresden, June 7th. Four hundred members were registered. It was decided to erect a building for cremation in Gotha, and twenty-three hundred dollars was subscribed.

Death of Ehrenberg.—Prof. C. G. Ehrenberg, of Berlin, the distinguished microscopist, died recently, at the age of eighty-one years.

Animal Vaccination.—A correspondent of the *British Medical Journal* very innocently asks the question, "if vaccination direct from the cow is now practised. If so, by whom, and with what result?" Very evidently the medical reading of this gentleman has been quite limited.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, August 12, 1876.

THE MEDICAL AND SURGICAL HISTORY OF THE WAR. VOL. II.*

THE second volume of the Surgical History of the Rebellion has at length made its appearance, and the anxious expectancy of the profession in regard to the value and extent of its contents is destined to be most satisfactorily realized. Although we have said enough of the previous volumes emanating from the Surgeon-General's office to give our readers a prospective idea of the scope of the present one: and although we have been preparing ourselves against any surprise, we confess ourselves somewhat bewildered in our attempts at a description of its completeness as a book of reference, its accuracy as a scientific record of surgical progress during the late war, and its intrinsic value as a text-book for military surgeons.

It is now pretty generally acknowledged that America holds the surgical sceptre of the world; and if there be any doubts as to the validity of our claims to this honor, they can be very triumphantly dispelled by a careful study of the volumes which have recorded our military experiences. When the idea of writing up the history of our surgical achievements during the rebellion first presented itself to the Surgeon-General, the task was considered to be of such magnitude that anything like systematic completeness seemed like the wild dreams of a crazy enthusiast; but now that the most extravagant expectations of the most sanguine are matters of fact, we cannot be too lavish in our praise of the wonderful perseverance which has brought about this brilliant culmination. It will be recollected by such as are acquainted with the first volume of this series, that it contained a description of over forty-nine thousand cases of injuries of the head, face, neck, spine, and chest. In the present volume, under the same able editorship of Assistant-Surgeon Geo. A. Otis, the account of these wounds and injuries is continued, according to their regional classification. A faint idea of the marvellous completeness attained and immense labor expended in the present work, can be gained, when we consider that eighty-five hundred and thirty-eight cases of wounds of the abdomen are tabulated and described, and details of six hundred and ten of them recorded: thirty-one hundred cases of wounds of the pelvis are enumerated, and six hundred and ten detailed; twelve thousand six hundred and eighty-one cases of flesh wounds of back are also tabulated, and eighty-eight thousand seven hundred and forty-one cases of wounds of the upper extremities are given, with details of eight hundred and seventeen; together with the principal facts concerning thirty-seven hundred and twelve excisions, and eighty-two hundred and forty-five amputations. We cannot attempt any critical analysis of its contents, nor can we present even in outline the conclusions which have been drawn from the experiences which it records, as these would of themselves swell an ordinary article into the dimensions of a good-sized text-book. It is, in truth, one of those works which are so encyclopædal in character, that each chapter is a treatise in itself; and must be separately studied and digested before any justifiable criticisms can be made or any definite opinions of the relative value of the different subjects can be expressed.

To dismiss the consideration of the volume with the hackneyed commendations so usual in book notices, would make it appear to the casual reader that there was nothing for any extraordinary comment; yet, in the present instance, such a course is forced upon us, as one of the inevitable accidents of time and circumstance. When, however, we speak of the work, in a general way, as an event in the surgical history of our nation; as a vindication of our claim as leaders in surgical knowledge and expedients; as the most remarkable contribution of its kind that has been made to science—we cannot conscientiously open ourselves to any blame for exaggeration of its merit or for extravagance in its praise.

It is alike impossible to estimate the influence which these records will have upon the advancement of military surgery in every portion of the globe. For years to come these histories will be the foundation-stones upon which the practice of army surgeons will be built, and will serve as starting-points of new investigations for every enthusiastic searcher after new truths, and every conscientious founder of new doctrines. The methods of treatment which have been recommended, founded as they are upon the observation and study of thousands of cases, will for a long time to come be established and undebatable until an equal array of contradictory data can be presented.

* The Medical and Surgical History of the War of the Rebellion. Part II., Vol. II. Surgical History, prepared under the Direction of Joseph K. Barnes, Surgeon-General U. S. Army, by George A. Otis, Assistant-Surgeon U. S. Army. First Issue. Washington: Government Printing-Office, 1876. 4to, pp. 1024.

As there has been no attempt at theorizing on the part of Surgeon Otis, but merely a desire to draw the legitimate conclusions from the facts recorded, there is no danger that the influence of the work as an absolute authority will soon be lost. To it every military surgeon will go, as a storehouse of the most extensive experience on record; and from it he will derive all the necessary precedent for the simplest as well as the most formidable of the operations ever performed upon the field or general hospital. A special value of the work is the great number of elegant illustrations, taken direct from life subjects and from pathological specimens in the Army Medical Museum. Done in the highest style of the art, they give an accuracy to the detail of appearances which eclipses any attempt at description in the text, and impresses upon the mind points in a given case which would otherwise be perhaps entirely lost sight of. All these specimens, being duly numbered, can be examined and studied as such in the Army Cabinet.

The marvellous success of this enterprise, while it reflects credit upon all concerned in its inception, affords a remarkable example of the benefits of governmental endowment. By no other means could such a work have been carried on, and in no other way could the results be made available to science. It is a matter of congratulation that such a publication, so satisfactory to those for whom it was intended, proves so unmistakably the wisdom and forethought of our legislators, and establishes such a brilliant precedent for other undertakings of similar scientific value.

THE DENTISTS' FUTURE.

The dentists of Pennsylvania have held their annual meeting at Philadelphia within a few days past. The medical profession is interested in their deliberations, chiefly on account of the efforts they are making to elevate their standard of education by association in some form or other with medical schools. Each State and local dental society will doubtless discuss the same important question in due time. In the present condition of things, the dentist is puzzled to know whether he is practising a specialty which is simply an offshoot of the great domain of medicine, or whether it is a distinct science and art, independent and standing on its own merits. In other words, a preference is expressed by many of these gentlemen to develop into something more than mere mechanical workers in enamel and dentine. To be oral surgeons savors of much greater dignity, and gives them a decidedly more elevated professional status. Many of the more accomplished among them are sincerely anxious that their duties shall be amplified, so that they shall be something more than handlers of mallets and files, ruthless destroyers of aching nerves, fillers of decayed cavities and extractors of worthless snags of once valuable ivories. Hence has arisen the question for discussion in dental societies everywhere, whether dentistry shall not be taught in medical schools. Practical steps have indeed been already taken to test the feasibility of this measure; for we read in the proceedings of the Pennsylvania society, that professors of medical colleges from that State and from New York were personally present, or communicated their views by letter, expressing their desire to add dental chairs to the curriculum of study, so that dental and medical students might be co-educated. It was stated that, so far as the University of Pennsylvania was concerned, nothing but the indifference of its Trustees stood in the way of the accomplishment of this change. It was especially urged by one professor, that the connection of diseases of the teeth and those of the nervous system was well worthy of study in such institutions. We believe that two points must be fully considered previous to a solution of the question. Is it desirable that dentists shall receive a thorough medical education? Is it expedient to teach dental surgery, in all its details, to medical students? So far as we can judge, the dentists seem more anxious about the matter than the doctors. Unless some decided initiatory step is soon taken by a medical school, the fusion may be long postponed, discussion being coupled with inaction from year to year. The terms of the agreement for mutual attachment, by which dental colleges will be absorbed and wholly disappear, will at least be interesting. So much personal sacrifice will be involved, that we confess to some curiosity as to the details by which it is to be effected.

Reports of Societies.

AMERICAN MEDICAL ASSOCIATION.

Section of Medical Jurisprudence, Chemistry, and Physiology.

This Section was only in session one day, Wednesday, June 7; Chairman, Dr. E. Llyod Howard, of Maryland; Secretary, Dr. D. A. Morse, of Ohio.

APPLICATION OF PHOTOGRAPHY TO MICROMETRY.

A paper was presented by Dr. J. J. Woodward, U. S. Army, on "The Application of Photography to Micrometry, with special reference to the Micrometry of Blood in Criminal Cases." He described in technical detail his very interesting method of obtaining photographs of microscopic objects, pointed out some of the defects of other processes, and alluded to the employment of photographs of blood-stains in the court-room. He criticised the spirit of exaggeration of certain writers who claim or insinuate that they possess the power of unerringly discriminating human blood from that of other animals in the dried stains submitted to examination in criminal cases. He cited Prof. Gulliver's recently revised table of measurements of corpuscles of the vertebrata (published in the Proceedings of the Zoological Society of London, June 15, 1875) in confirmation of the futility

of attempting to distinguish human blood from that of other animals in dried stains in such cases. The average of all measurements of human blood he had found rather larger than the average of all the measurements of dog's blood; but it is not rare to find specimens of dog's blood in which the average size of the corpuscles is larger than that of many samples of human blood. He concluded with a table of measurements of the red corpuscles of man, the dog, and the guinea-pig, photo-micrographically measured by his method; and exhibited photographic specimens of corpuscles. The comparative sizes were shown to vary with different specimens; so much so, indeed, that it was sometimes impossible to tell from the examination whether the particular specimen belonged to the guinea-pig, to the dog, or to man. He stated that it was his intention to prepare a series of photographs of moist blood, and of blood soaked out from dried stains, as in criminal cases.

Dr. Didama, of New York, suggested that pig's blood would be more interesting than guinea-pig's, and more likely to be a matter of criminal moment. Would Dr. Woodward be willing to swear to the difference between pig's and man's blood, after the drying process and after shrinking had taken place?

Dr. Woodward said it would be easy to distinguish them if we had specimens when fresh, and treated them both alike, and knew more about the conditions leading to shrinkage and contraction than we know now. He then exhibited photographs in which the human blood, acted upon by reagents, had shrunk to the size of a pig's corpuscles; but you may have specimens of the latter which have not shrunk, and the addition of a drop of water to a drop of fresh human blood will make its corpuscles smaller than those of the pig.

Dr. Didama asked whether the Doctor would be able to pick out the corpuscles of human and dog's blood, if both had undergone the same shrinkage.

Dr. Woodward replied, decidedly not. The smallest corpuscles of human blood are smaller than the largest corpuscles of the dog's blood.

Dr. J. G. Richardson, of Philadelphia, after complimenting Dr. Woodward on his success in photo-micrography, quoted from his own paper on the value of high powers, previously published, showing that the assertion of Virchow, that a man's life should not be put in question on the uncertain calculation of a blood corpuscle's ratio of contraction by drying, was not a fair statement of the point at issue; for if the red blood-corpuscles of oxen, horses, pigs, sheep, etc., are all much smaller than those of man, no degree of contraction would render the stains in which they occur more liable to be mistaken for man's blood. The cell wall of a red blood globule is incapable of any marked expansion by drying or moistening with the fluids recommended for the examination of blood-stains. The slight increase of size already referred to as occurring in the desiccation of a thin film of blood forms only an apparent exception, and is probably due to change of shape during the complete flattening out of the discs as they lose their contained water. The only danger is, if the cell walls contract, we might, by a possible error in diagnosis of the origin of a blood-stain, contribute to a criminal's escape, never to the punishment of the innocent. Were it possible for the corpuscles of the ox, pig, sheep, etc., to expand to the size of human corpuscles, he would be the first to refuse to make a diagnosis in criminal cases. He asked Dr. Woodward whether he had ever seen any marked expansion of the corpuscles of human or animal blood occur, whilst following out his method for the examination of blood-stains with the three-quarter per cent. salt solution.

Dr. Woodward said that he had not, but had frequently observed rapid and almost instantaneous contraction of blood-corpuscles, treated with various reagents. The expansion occurs while drying, and before getting into the hands of the experts.

Dr. Richardson stated that he had never undertaken to say absolutely from microscopic investigation alone, that a given specimen was human blood; but when a prisoner declared that the spots upon his knife, on which were corpuscles averaging more than $\frac{1}{4000}$ of an inch in diameter, were from a sheep, microscopic examination could detect the falsehood, a sheep's corpuscles being comparatively small.

Dr. Woodward said that if he found a series of corpuscles in a stain measuring on an average 300 or 295 millionths of an inch in diameter, he would grant that a microscopist might swear they were not those of sheep's blood.

Dr. Richardson thought that Gulliver had admitted that, in some instances, a diagnosis might be made, by means of micrometry, between human and sheep's blood, and requested Dr. Woodward to read the passage already referred to, as follows: "As before noticed, the magnitude of the corpuscles in a single species, not excepting the human, is liable to variations within certain limits; and there commonly appear in one field of vision of the same corpuscles, differences amounting to at least one-third larger and smaller than the average. Hence, as regards the medico-legal question, however truly a careful observer (Dr. Joseph G. Richardson, *Monthly Micros. Journal*, Sept., 1874) may have distinguished, by comparative measurements of the corpuscles, stains of human blood from those of the sheep or ox; this kind of diagnosis, as Dr. J. J. Woodward observed, (*Monthly Micros. Journal*, Feb., 1875) would be ineffectual in some probable and more possible cases. It should be borne in mind, too, that in the apyrenemata the membranous bases of the blood discs, when deprived of their color by maceration in water, are about a third smaller than the unaltered corpuscles."

The chairman renewing the question whether Dr. Woodward could decide positively between human and pig's blood-stains, the latter replied that in a decision, as a mere matter of interest between gentlemen, he would be willing to give his opinion as to one or the other; but if it was a case in which life was involved, the possibilities of mistake are too great, and he would probably feel differently.

The paper of Dr. Woodward was referred to the Committee of Publication, and the Section adjourned *sine die*.

Section on Surgery and Anatomy.

The Section met on Tuesday afternoon, June 6; Dr. Alonzo Garcelon, of Maine, Chairman; Dr. E. F. Easley, of Arkansas, Secretary.

Treatment of Pott's Disease of the Spine.

Prof. Sayre, of New York, read a paper on the treatment of Pott's disease of the spine. He was of the opinion that the causation was generally, if not always, traumatic, and not necessarily of tubercular or constitutional origin. He gave a full description of the manner of examination to establish an early diagnosis before the occurrence of deformity. The treatment should be by extension of the spinal column, by suspension of the body by a sling under the arms, occiput, and chin, and elevating it by a compound

pulley; retaining the body in this extended position by a plaster-of-Paris bandage, applied on a very tightly fitting shirt, and laying the patient on an air or water bed until the plaster has set or hardened, when he can generally walk well without assistance, and the respiration becomes deep, full and free, but diaphragmatic, the perineum ascending and descending synchronously with the diaphragm. The short jerking respiration is immediately relieved. The skin is retained absolutely at rest, and so are the ribs, and recovery takes place the same as in fracture—by rest—recovery being prevented if motion is allowed.

After reading the paper he exhibited the suspending apparatus, and presented several cases treated by him. He thought that doctors should treat their patients themselves, and not send them to specialists. The cases shown were far advanced, but it is very important that this treatment should be entered upon before the occurrence of deformity. At the same time give the patient the very best constitutional treatment, without drugs, if possible. The thinner your bandage is applied the better; the ordinary bandage used for fractures is too tight and heavy. Some of these same facts had previously been given, in anticipation, in a report of a clinical lecture delivered by him; but now he could speak positively from a large number of cases that had since come into his hands for treatment.

Dr. Quimby, of New Jersey, inquired whether respiration was not sometimes interfered with.

Dr. Sayre said that a projecting sternum or projecting points might be guarded and bent in sometimes. An air bed was also a great assistance; or pads might be used.

Dr. Benj. Lee, of Philadelphia, in seconding the motion to refer the paper, which he highly commended, to the Publication Committee, stated that we must treat caries of the spine exactly as we would treat a fracture. He had not resorted to Dr. Sayre's method, but should do so at a favorable opportunity. He believed that too many of these cases are unrecognized by medical men in their early stages. Dr. Sayre's suggestions as to early diagnosis were very important. We were formerly taught that the diagnostic point in Pott's disease was the pain produced by pressure on the spine; but if you place a patient on his face, and make pressure on the projecting portion of the spine, you separate the bodies which are pressing together, and thus relieve the pain. He claimed for himself the credit of having been the first to point out the importance of gastralgia as an initial and characteristic symptom. The idea of making a suspension apparatus, "a hanging machine," as Dr. Sayre calls it, was first introduced by Prof. J. K Mitchell. It fell into disuse, but Dr. Lee had revived it at the suggestion of Dr. M.'s son; the patient daily suspending himself for a certain length of time, so as to produce complete extension of the spinal column and relieve the pressure at the seat of disease.

Dr. Quimby differed with Dr. Sayre in ascribing these cases to a traumatic origin rather than to a strumous condition.

Dr. Sayre said he never taught that doctrine; he meant that a child with a constitutional taint would have disease developed and localized in his spine by very much less traumatic force than a robust, vigorous one.

The paper was referred to the Committee on Publication.

Dr. Easley, of Arkansas, said that Dr. Sayre and Mr. Bryant, of London, had shown more clearly than any one else that there is no necessary connection between scrofula and diseases of the bones; but thought the former gentleman went too far in ascribing so much to traumatic causes.

Dr. Dowell, of Texas, read a paper on Hernia, from the Transactions of the State Medical Society of Texas, giving an account of his new operation for its radical cure. It was referred to the Committee on Publication.

TREATMENT OF COLLES' FRACTURE.

Dr. Henry A. Martin, of Boston, described a splint for the treatment of Colles' fracture. It was invented by Dr. W. F. Carr, of New Hampshire, but had been very successful in his hands, little or no deformity resulting. The fault with the splints generally used was, that the radius was treated as if it was a straight instead of a curved bone. Simple fracture by this splint is completely relieved of pain, and there is no stiffness of the metacarpo phalangeal articulations. The patient from the first handles his knife and fork at meals—awkwardly, it is true—and can make some little use of his hand after the first week. During the latter period he merely confines the carpus by plaster strapped behind it. The dressings are removed in four or five days. Perfect union takes place much earlier than the period laid down in the books. The whole principle involved is to treat the radius as a concave bone, and supply the exact form of pad on which it should rest. The oblique cross-bar relieves the usual tendency to deformity towards the radial side. The splints are padded with roll cotton merely to make them softer, not to change their form. If the wrist has been sprained, these splints give perfect rest. They could be made very cheaply.

Dr. Dibrell, of Arkansas, said that one of the great sources of trouble was rupture of the annular ligament.

Dr. Martin stated that this form of splint met that difficulty also.

Dr. Sayre entered his protest against unnecessary re-examination of fractures. The general principle in fractures was to adjust the apparatus, and then regulate it; and keep it there until you get a chance to examine it.

Dr. Martin was as much opposed as any one to this readjustment, because it involved the danger of non-union.

Dr. McClurg, of Pennsylvania, also condemned it as meddlesome surgery, and thought it was unnecessary to see such a case more than three times, no matter what splint was used. The surgeon should know exactly what to do as soon as he had determined the nature of the injury; and if he applied his apparatus on correct principles, he would be successful.

Dr. Dubois, of New York, had improvised a splint for this fracture by taking a shingle and holding it by a bandage with a stick at the end, laying it on obliquely as this round stick is put on, and then putting a pad upon the splint, and winding around a bandage and making it solid.

Dr. Quimby thought Dr. Carr's splint would put the hand in a very awkward position. He didn't think it would be applicable where there was much inflammatory action. He regretted that the experience of Dr. Hamilton, in cases of Colles' fracture, as quoted by Dr. Martin, had been unfavorable, many of them resulting in deformity.

On motion, Dr. Martin was requested to prepare a paper on the subject, to be referred to the Committee on Publication.

A NEW TRUSS.

On Wednesday afternoon, Dr. Easley, Secretary, presented a little truss sent him by Dr. Ives, of New

York, having a broad lever on the upper portion of the pad, which gave it the name of the "lever pad truss." The band is a strong piece of elastic, and the flat lever coming against the abdomen prevents the apparatus from slipping out of place.

Dr. Ives said he had had much satisfaction with this truss in about a dozen cases. It does away with the annoying strap between the legs.

TREATMENT OF FRACTURES.

Dr. Plummer, of Rhode Island, wished the discussion on fractures of the femur, begun at Detroit, revived here. Dr. Sayre had then taken the ground in favor of their treatment by the triple inclined plane. After citing some successful cases in illustration of the advantages to be derived from it, he referred to Dr. Treswell's splint as that he is in the habit of using, with a joint that overlaps, and a cog-wheel for necessary extension, and arranged to vary the angles of the body and of the thighs.

Dr. Keller, of Kentucky, said that we can only get perfect apposition by the triple inclined plane, and cited two recent cases in confirmation. Much of the success depends upon the muscular development of the patient, being much more probable in an extremely relaxed muscular system. As urged by Dr. Sayre, we must first secure apposition, then fixation. Splints are instruments of torture to patients. He believed, in the cases mentioned by Dr. Plummer, that anything that could be moulded and adapted perfectly to the prominences and depressions of the patient would fulfil the indications for successful treatment. After referring to the difficulties of diagnosis in intra-capsular fractures of the thigh, he said that it was a slur upon surgery to state that we cannot have bony union in old women with intra-capsular fracture. The fault was, we too often attempted it with appliances movable at the will of the patient.

Dr. Gray, of Buffalo, referred to the employment of adhesive strips for the perineal band, at the Buffalo Hospital, and to a case of dislocated hip reduced after nine months.

Dr. Plummer again alluded to the advantages of the treatment referred to by him, in the greater comfort to the patient.

Dr. Keller said there was no necessity for shortening to occur, if there was proper apposition.

PIROGOFF'S AMPUTATION.

Dr. Addinell Hewson, of Philadelphia, read a paper on Pirogoff's amputation, and showed several cases performed by him. He briefly sketched the early history of Syme's amputation to save the leg, and the advantages claimed for it by that surgeon in the five papers on the subject which he published in 1843 to 1847, in the *Edinburgh Medical Journal*. Pirogoff's operation for traumatic cases was suggested eleven years later than that of Syme. The Russian plan is that of a resection where the os calcis is not involved; both have claims to originality.

The various modifications of these operations, detailed by Erichsen, Lister, Hamilton, and others, were alluded to, and commented on for the following reason: Syme's purpose was to make the plantar flap long enough to preserve the posterior tibial artery beyond its point of division; they have disregarded this very important point, and thus ignored the principle of Syme's operation, of preserving entire the thick integument of the heel to form a cushion for the stump. Dr. Hewson then referred to the bad results that sometimes ensued from not exactly following Pirogoff's directions, and described in detail the various steps of the operation, pointing out at the same time the errors to be avoided. Dr. H. made it a rule to include in the plantar flap all the vessels possible—seven important vessels. He employed acupressure and torsion, with his compound forceps, instead of ligatures; has never had secondary hemorrhage. He generally used three silver stitches, intermediate strips of tarlatan gauze, held in place by collodion applied at their extremities, and over this a dry dressing of powdered clay or salicylic acid, held in place by bibulous paper or cotton wadding. The dressing is only disturbed at the end of a week to remove the stitches. Dr. Hewson then took occasion to renew his advocacy of the earth dressing, with all proper attention to cleanliness, and to laud the disinfecting powers of salicylic acid.

Dr. Quimby commended the dressing, but stated that in 1869 he had brought to the notice of the Association an operation which he thought preferable, especially in young subjects. He mentioned several cases in illustration, and called upon Prof. Post for his views in regard to it.

Dr. Post said that he had seen some of the cases alluded to. The great feature of Dr. Quimby's operation is that it leaves the anterior part of the leg perfectly intact. It did not, at first, seem to him proper to bring the wounded surface of the bone down in contact with the natural extremity of a bone covered with cartilage. It was like yoking an ox and an ass together. The danger from dividing the cellular structure of the bone in Syme's operation is avoided in Dr. Quimby's. The most eminent surgeons of New York have been satisfied with the results. The advantages were that the wound healed properly, in six weeks, the patient being able to bear his full weight on the limb, the operation being performed with facility.

Dr. Darby, of New York, said that he had been in the habit of referring to it in his lectures, as superior to Pirogoff's. In the latter operation he did not make the cut so far forward towards the toes as Dr. Hewson had stated.

Dr. Maclean, of Michigan, said, that for disease Pirogoff's operation is an unsound one fundamentally. If you leave any part of the bones of the ankle in scrofulous conditions here, the disease is sure to return. In railroad crushes, it is a different matter. Syme's amputation showed better results in disease. The accumulation of fluid in the stump is prevented by making a longitudinal slit and introducing a tent.

Dr. Hewson stated, that Pirogoff's cases were those of injury; those of Syme at the great infirmary of Edinburgh were consequent on diseases of bone; and it was but natural that he should generalize his operation, even after Pirogoff's was made known. Dr. Hewson then described more particularly the direction of the incisions, etc.

Dr. Quimby had had several of these operations in his practice, all of which healed by the first intention.

Dr. James R. Wood, of New York, said, that Syme's method was his favorite amputation, or sometimes a modification of it, where great laceration of the integuments existed, the ingenuity of the surgeon being taxed to cover the bone with integument. He had been told by the Surgeon-in-chief of the Russian Army that he preferred Syme's. The operation must be performed to avoid shortening of the limb. He seldom cut into a cartilage; the flow of synovial fluid would prevent union. Dr. Hewson, he stated, closed the wound at once, union taking place by the first intention. Dr. Wood kept everything open, making large flaps, which would shrink very much. He used

carbolic and salicylic acids. He never lost a drop of blood during the operation. Dr. Hewson's results were beautiful, his success a eulogy of his treatment, his stumps worth a visit to Philadelphia to see.

The thanks of the Section were tendered Dr. Hewson for his valuable paper, which was referred to the Committee on Publication.

SUSPENSION IN SPINAL CURVATURES.

Dr. Benjamin Lee, of Philadelphia, introduced a little girl, twelve years of age, illustrating the safety and feasibility of suspension in the treatment of spinal curvatures. The apparatus shown was a strong framework, from the middle of which was suspended his "spinal swing," being a rope passing over a pulley, carrying at one end a steel bow, to which are attached straps, to support the chin and occiput, and at the other wooden ovals to serve as handles. The head straps being so adjusted as to make equal traction on the chin and occiput in the line of the spinal axis, the patient, taking hold of the handles, drew down upon the rope until her feet were lifted from the floor, and she swung freely, half the weight being supported by the neck, and half by the arms. She then drew herself up hand over hand until her head nearly touched the pulley, and then slowly let herself down again. He desired to show that the method of suspension was a simple and pleasurable process. The amount of traction used was at the option of the patient. At first the child should use it for only ten minutes, but should gradually increase it to half an hour, twice daily.

A delegate inquired whether the same effect might not be obtained by the arms, or under the arms, as by using the neck or head.

Dr. Lee replied, that having it in a direct line of the spinal column, had more effect than if the force was distributed. In many cases the disease is above the shoulders.

Dr. Holden, of Vermont, remembered several years ago hearing Dr. Sayre, in a case of dislocation in the cervical region, caution his class about lifting children by the head, and thus causing dislocation.

Dr. Sayre said, the cases were entirely different as to the mode of suspension. The whole weight is sustained by the ligaments of the neck in the case referred to by Dr. Holden.

PERMANENT DRESSINGS OF GLUE IN FRACTURES.

Dr. R. J. Levis, of Philadelphia, described to the section a new and inexpensive method of applying a fixed dressing, used by him at the Pennsylvania Hospital; being ordinary glue, which hardens with great rapidity, to which oxide of zinc is added, until the mixture is rather white. Any kind of material, even a piece of blanket, can be used. (Specimens of discarded dressings thus made were exhibited.) Experiments were being made to determine the proportion of the oxide required. Too much of it makes the glue brittle. The hardening requires very few hours. He had abandoned starch dressings, giving glue the preference. Being cheap, it is desirable for hospital use. Glue alone takes too long to dry. It is the lightest dressing we have for its strength.

Dr. Levis also called attention to a new article of lint, very cheap, being but eight cents a yard, or fifty cents a pound, imported lint being a dollar. It is made of different kinds and thicknesses, and with a covering of a sort of pervious material, which only requires moistening to render it ready for use.

Dr. Hodgen, of St. Louis, inquired whether the glue dressing was applicable to fractures of the thigh.

Dr. Levis stated that it had been used in other forms of fracture.

Dr. Hodgen wished to enter his protest against the doctrine that any other than fixed dressings in fractures were instruments of torture. Reduction cannot always be properly accomplished. In some fractures of the thigh, even when a fixed dressing is applied, it will move itself, without interference of patient or any one else. Results will necessarily be unfavorable in such cases. Gentlemen who think differently must have forgotten the laws of physics and anatomy, and that a part so long at rest will commence to atrophy. The treatment by the long splint and the perineal band is an abomination that should be discarded forever. He referred to different forms of fracture apparatus, giving his objections to the inclined planes; and expressed surprise that a man of such mechanical tact as Dr. Sayre did not employ suspension, and thus free his patient of pain without interfering with the circulation. He had rarely noticed the snap referred to by all authorities in the reduction of dislocations of the hip-joint.

Dr. Sayre said that Smith's anterior splint rarely put the limb in the precise position which was given it on the triple inclined plane, but the latter has the advantage that, if necessary, you can move your patient to a distance. After the apparatus was once fixed it was not intended to be moved, as some had suggested. The universal law for fracture is adjustment, fixation, and retention until union occurs, which will be by first intention of the bone in twelve to fourteen days. After that you can examine it every day. As Dr. Hodgen had said, there would be loss by shrinkage of the plaster-of-Paris; new plaster must be put on frequently, if necessary, and the slack taken in. Extension after adjustment is all wrong; it excites reflex irritation of the muscles, when you want quiet and rest.

Dr. Post stated that he was deputed by the Sanitary Commission at the close of the late war, to visit the military hospitals at Washington, particularly to learn the results of gunshot fractures of the thigh. He found that about half of the number had been treated by extension with weight and pulley; the others by a variety of methods. He was satisfied that the cases treated by N. R. Smith's apparatus, by extension by weight and pulley, was much superior to results obtained by any other method. The patients said that their sufferings were much less after application of the extending force. Suspension need not be made if the patient is perfectly comfortable without it. He had seen many excellent results at Bellevue and other hospitals, where the patient was carefully watched, under other kinds of treatment, as the plaster-of-Paris; but the latter was a dangerous remedy in the hands of the inexperienced, cases in illustration of which were cited by him.

Dr. Quimby maintained that we cannot get good results without extension and counter-extension.

Dr. Hodgen inquired why the patients at Bellevue were allowed to walk around the room in the plaster-of-Paris apparatus. Atrophy would not be prevented by such exercise when the limb was thus confined. Since the war he had treated his cases by suspension and extension with good results.

Dr. Gill, of Illinois, was of the opinion that greater attention should be paid to the measurements, in order to ascertain whether one kind of apparatus or another will give better results. He described an instrument made simply with a straight cross-piece with hinges, which would obviate mistakes.

Dr. Brother, of Illinois, urged that the apparatus

which confined the patient to bed with suspension and extension apparatus gives him more comfort and produces just as good results as any other.

On Thursday afternoon, Dr. Sayre introduced a little patient, just brought to his notice, of whose case his father, a physician, gave the history, one of Pott's disease resulting from accident. He had applied the apparatus recommended by Dr. Sayre without consulting him, but too loosely; and had, therefore, brought him on to see him here. Dr. Sayre again explained at length the method of application, measurement, etc., upon the patient.

After remarks by the Chairman as to the advantage of perfect rest involved in this mode of treatment, Dr. Brother, of Illinois, protested against the doctrine taught by Dr. Sayre, that shortening or deformity should not occur in fractures of the femur, as being contrary to the teachings of every surgical writer of the day. Suits for malpractice will be the result. He then enumerated the advantages of suspension and extension.

Dr. Quimby suggested the name of Dr. J. W. Thompson, of Kentucky, who had studied the subject of inheritance of syphilis, as a member of the committee which was to report next year, which, after discussion, was adopted. After some further explanatory remarks on his amputation of the foot, Dr. Quimby brought before the Section an operation for extraction of polypus of the uterus, by twisting the tumor, allowing it to remain *in situ* for a few days, to cause it almost to slough at the stump, and removing it with forceps without hemorrhage, the patient all the while being kept perfectly quiet. The plan is suggested when the polypus is within the uterus.

Dr. Dunlap had employed this method, but preferred the wire and écraseur, because of the risk of pyæmia. He described the manipulation required.

Dr. Quimby referred to the difficulty of this method when the tumor was large.

Dr. J. L. Atlee inquired why, in ordinary cases, the twisting suggested by Dr. Quimby should not be continued at once until the tumor was separated, and thus avoid risk of septicæmia. He cited an interesting case to show the advantage of pulling down the tumor with obstetric forceps far enough to have a thorough inspection of it, and then operating.

POLYPOUS TUMORS OF THE UTERUS.

Dr. McClurg referred to the facility with which even large polypous tumors could be twisted off.

Dr. Bell wished to know how we could tell that a fibrous tumor has a pedicle.

Dr. Atlee said they must have an attachment. First dilate the os with a sea-tangle tent, then a sponge tent, and ascertain the position of the fibroid; after which, if we give ergot, we may remove the polypus.

In reply to inquiry by Dr. Gill, as to amount of twisting required, Dr. Quimby said it was difficult to lay down any rules. A very few twists will arrest the circulation. There was less danger from septicæmia than from undue manipulation; and a fragment left behind after the use of the écraseur might produce septicæmia more easily than the whole mass would, if left in the cavity after twisting.

Dr. Reyburn, of Washington, thought it better to twist off the tumor at once, and leave a healthy granulating surface behind. He argued in favor of non-interference with stationary uterine intramural tumors.

Dr. Brother asked Dr. Quimby why he would not give another twist to separate it.

Dr. Quimby said the object was to prevent irritation and hemorrhage.

Dr. Dunlap said that if septicæmia occurred, it would be because of the presence of this large mass of gangrenous matter; there would not be enough pus to produce pyæmia. He agreed with Dr. Reyburn that non-progressive intramural tumors need not be disturbed. He cited cases showing the difficulty in some cases of applying the écraseur and wire. He was opposed to slow dilatation with tents.

Dr. Quimby said that the mass smelt as sweet as it did when making the examination. The point of constriction was the only situation at which suppuration could occur.

Dr. Waterman, of Indiana, thought this discussion belonged to the Section of Obstetrics; but the chairman said that, in his view, it was purely a question of surgical treatment.

Dr. W. L. Atlee never employed ligatures in the treatment of fibroids, but removed the latter at once with the knife, when they were accessible. He drew them down with the forceps, and enucleated them as he did ovarian tumors when adherent to the intestines. There is little danger of hemorrhage, if you have the proper applications, as the persulphate of iron, ready to tampon with. He would not hesitate to nick the mouth of the womb all around, if necessary, and then give ergot, bring down the mass and operate with the knife. The tampon of persulphate should remain three or four hours. Hemorrhage only occurs when the fibroid impinges on the hypertrophied mucous membrane, and could be arrested at once by passing the end of the bistoury into the cavity of the uterus, guided by the sound, turning the edge against the mucous surface, and bringing it out through the substance of the tumor. The vitality of the tumor destroyed, it is thrown off like an old placenta, and the mucous membrane will heal up. If septicæmia occurs, sulphurous acid is the best remedy, inhaled in the atmosphere of the room or given internally. He would not leave the tumor behind after twisting it, but remove it at once. He never meddled with intramural fibroids unless they were doing mischief.

Dr. Easley confirmed the views of Dr. Atlee as to the excellent antiseptic properties of sulphurous acid.

Dr. Post agreed generally with Dr. Atlee, and in regard to the danger of septicæmia from leaving the mass in the uterus. He differed with him in the view that the knife was always preferable to the ligature in the removal of parts; some vascular tumors and cutaneous diseases were certainly exceptions to such a sweeping rule.

Dr. Atlee stated that he only alluded to these fibroid tumors.

After remarks by Dr. Scott, of Ohio, on the conditions under which absorption might occur to produce septicæmia, the Section adjourned *sine die*.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, June 15, 1876.

Dr. S. S. Purple, President, in the Chair.

The President announced the death of Dr. John O. Stone, one of the founders of the Academy, and appointed Drs. A. C. Post, O. White, and G. M. Smith as committee to present appropriate resolutions.

Dr. T. C. Finnell read a memorial upon the death of Dr. Cyrus Weeks, one of the oldest members of the

Academy, and presented a resolution, which was unanimously adopted.

Dr. Gouverneur M. Smith, from the Committee on Portraits, presented a written report, and acknowledged the receipt of a portrait of Dr. James Anderson, an Ex-President, presented by his son, Dr. J. H. Anderson.

Appropriate resolutions relating to the death of Dr. John O. Stone were read by Dr. A. C. Post, and unanimously adopted by the Academy.

ON CHOREA—ITS CAUSES AND ITS TREATMENT.

Dr. George T. Stevens, of Albany, N. Y., read an interesting paper upon the above subject, in which he announced a new theory with reference to the cause of what has heretofore remained a scientific mystery, notwithstanding the profound researches of medical inquiry. Dr. Stevens first gave a brief *résumé* of the opinions at present held by the profession concerning the pathology, etiology, prognosis and treatment of chorea, and then advanced the following proposition:

Chorea is a functional disturbance of the nervous system which may give rise to organic lesions, and which arises from irritation dependent upon anomalous refraction of the eye, and in a very large proportion of cases, to hypermetropia.

Dr. Stevens had studied this subject in a three-fold manner: 1. Clinically, where he had been led gradually and almost unconsciously to the conclusion embraced in the foregoing proposition; 2, by means of observations, with the view of testing the correctness of the theory; and, 3, as a reasonable and natural hypothesis.

At first the doctor regarded the association of error of refraction and chorea as a mere coincidence, but during the past two years he had regarded the coincidence as unfailing.

Dr. Stevens had collected thirty-three cases of chorea, and had found simple hypermetropia in twenty-four. Thirteen of the cases had been under his personal observation, clinically, and in no instance had proper convex glasses failed to afford relief to the choreic symptoms, and in several cases the relief had been prompt and complete. In the nine cases in which hypermetropia was not found, other optical errors were present. With regard to the reasonableness of the hypothesis that such an error of refraction could be the cause of so serious a nervous derangement, the doctor remarked that it would probably be less apparent to the general practitioner than to either the specialist in nervous diseases or the oculist. Allusion was made to the fact that almost every one was familiar with the aching eyes, the nausea, and the vertigo which might be produced by wearing glasses that disturbed the accommodation of the eye. Peripheral irritation, long continued at any part of the body, might give rise to serious nervous disturbance, and such cause Dr. Stevens regarded as abundantly potent to produce chorea. There was a constant state of confusion among the muscles of accommodation; an irrepressible conflict, which had given rise to a general nervous erethism, and then came measles, scarlatina, fright, or some other exciting cause, by which the nervous system was still further disturbed, and chorea was developed.

With reference to the embolic theory of chorea, the doctor remarked it was a well-known fact that sufficient irritation could be transmitted from one eye through the deep-seated origin of the third pair of nerves to produce destruction of the opposite eye; and was it unreasonable to suppose that degenerations and lesions might be induced at the origin of those nerves, in consequence of continued irritation and vexation at their extremities? Could not the lesions described by Hughlings Jackson, as occurring in chorea, be in that way satisfactorily explained?

In other words, peripheral irritation was regarded as the cause of chorea, and that irritation was located in the accommodating muscles of the eye.

The following proposition was submitted by Dr. Stevens, without argument:

Functional nervous diseases of all kinds are, beyond any and all other causes combined, dependent upon anomalous refraction of the eyes.

The paper being open for discussion, Dr. Noyes remarked that he had been much interested in the facts and observations brought forward by Dr. Stevens; although not prepared to give them either his dissent or approval. There were, undoubtedly, important disturbances of function dependent upon functional errors of sight; and Dr. Weir Mitchell, of Philadelphia, had called attention to certain cases of headache which found their true solution in ocular derangements. Any form of peripheral irritation in a susceptible person might give rise to some disorder of muscular coördination. Dr. Noyes related the history of a case of chorea which seemed difficult to explain by the theory advanced by Dr. Stevens. A patient had been suffering from chorea for some time, and was brought to him for examination concerning trouble referable to the eyes, when it was found that there was certainly no error of refraction, and only a slight amount of debility of the ocular muscles. To that debility the Doctor ascribed all the visional inconvenience and distress, and furthermore explained it on the ground of the general debility of the patient, feeling that there was no reason why want of proper power of coördination in the general muscular system could not at the same time exist in the ocular muscular system. A tonic course of treatment cured the patient completely. Dr. Noyes was also unable to understand how Dr. Stevens' theory would explain certain peculiar forms of chorea, such as hemi-chorea and the like. The crucial test, however, for the theory would be facts derived from the examination of a large number of cases, with special reference to the presence or absence of optical errors.

Dr. Detmold regarded the facts brought forward by Dr. Stevens as sufficient certainly to encourage further investigation, but he was unable to see how it could explain the following case. A child, when three days old, lost both eyes from a sloughing ophthalmia, but it had since had chorea. Of course it was an isolated case. Again, if the theory was correct, how was it that so many cases got well while under the care of the common physician, and that without the use of glasses, or any evidence of disturbance of the vision? The Doctor, however, did not feel prepared to express an opinion either for or against the theory.

Dr. E. C. Seguin remarked that he was pleased with the paper by Dr. Stevens, because it was based upon the arrangement of a number of well-observed facts in support of a definite proposition. The crucial test, as remarked by Dr. Noyes, was not in the reasoning upon the theory, but in the examination of a series of cases by oculists, and possibly by specialists on nervous diseases. Dr. Seguin, however, brought forward a number of possible objections to the application of the theory to chorea in general.

First. The small number of cases of chorea in proportion to the large number of cases of myopia and hypermetropia found in our public schools.

Second. Some of the sympathetic symptoms of errors of refraction were remarkable for their definiteness and duration. They were vertigo, headache of various forms, and nausea and those symptoms when dependent upon errors of refraction, were remarkably persistent; whereas the same symptoms in connection with chorea were very seldom observed.

Third. Chorea might be produced by a great variety of pathological conditions; possibly lesion of the corpus striatum, dyscrasia, various kinds of peripheral irritation, mental disturbances and irritation, fear probably being the most common; and one of the most apposite under this head was the chorea of pregnancy.

Dr. Seguin also mentioned the remarkable coincidence which had been noted between chorea and cardiac disease, a fact not alluded to in the paper. There was a large class of pathologists who believed that the solution of the choreic problem could there be found, and that lesions productive of chorea existed somewhere in the brain, and were brought out by the cardiac disease.

Fourth. The effect of treatment was opposed to the doctrine as applicable to chorea in general. If the theory were true, it would seem that any mode of treatment, except such as corrected the refraction, would fail to cure, but he believed that chorea was positively cured by the use of arsenic, ether to the spine, etc., and that the cure was effected so rapidly that the question in those cases certainly was definitely solved. Furthermore, those cases in which relapse occurred were just those in which cardiac disease could be distinctly made out, and in whom there was a constant source of supply for material which might give rise to minute emboli in the corpus striatum.

Dr. A. McL. Hamilton fully concurred in the remarks made by Dr. Seguin, and continued by saying that his attention had been called to hypermetropia and other eye symptoms in cases of chorea, and he had found that they were invariably secondary. Strabismus was a common associate of chorea, and no other eye trouble had he found in connection with his cases of that disease.

Dr. Stevens remarked, with regard to Dr. Noyes' case, that, although it formed an apparent exception, it was actually one of the cases which served to establish his theory. For, although no error of refraction was found, the precise condition present in hypermetropia was there, namely: unequal action between the muscles of convergence and the muscle of accommodation.

With regard to Dr. Detmold's case, it was a fact well known by pathologists that destructive ulceration of the cornea involved the ciliary nerves to such an extent that removal of the affected eye became necessary to save the one remaining unaffected. There was, therefore, a nervous irritation in the very region involved in the hypermetropic condition, and that irritation might have given rise to the subsequent chorea.

With reference to Dr. Hamilton's cases of chorea, in which strabismus was present, no better evidence was needed of the presence of hypermetropia, for strabismus was one of the symptoms of that condition.

With respect to the infrequent occurrence of chorea among hypermetropic and metropic children, if the theory be true, the same argument might be used against hypermetropia being a cause of strabismus, and yet it was acknowledged to be the great cause of strabismus. Concerning the accompanying cardiac trouble sometimes found in cases of chorea, Dr. Stevens stated he was not able, perhaps, to speak with authority upon that subject, but he could see no reason why it might not be the irregular supply of nerve force, causing irregular heart action, that gave rise to the cardiac disease. Certainly there were very many cases of chorea in which cardiac disease was not present.

Dr. Gouverneur M. Smith inquired of Dr. Stevens how he would explain those cases of chorea which were so rapidly cured—for example, by the use of arsenic?

Dr. Stevens replied that certain functional disturbances of a nervous character might be relieved by the use of arsenic, which imparted vigor to the general system; but it did not necessarily follow that the predisposing cause was also removed; and it did not prove but that, with the increased vigor imparted to the muscular system in general, there came vigor also to the ciliary muscle.

Dr. J. C. Peters believed that, while certain cases of chorea might, and very probably had been, explained by the theory advanced by Dr. Stevens, there were many other cases, the occurrence of which the theory hardly explained.

Upon motion made by Dr. Detmold, a vote of thanks was unanimously tendered to Dr. Stevens for his able and interesting paper.

The Academy then adjourned, to meet on the third Thursday of September.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, June 16th, 1876.

Dr. Frank P. Foster, Vice-President, in the Chair.

Dr. E. Darwin Hudson read a paper

ON THE DIAGNOSTIC RELATIONS OF INDIGESTIONS,

by which was meant, not only what was more commonly embraced under the head of dyspepsia, but perversion of absorption and secretion, together with the morbid blood state which they created. Whether the valves of the heart became diseased, the arteries became degenerated, the brain the seat of softening, was regarded as a question of digestion and assimilation. The Doctor then brought forward the histories of cases illustrating the interest and importance of the symptomatic and sympathetic symptoms of indigestion in its various forms. The paper was discussed by Dr. O'Sullivan. The Association re-elected its old Board of Trustees and then adjourned.

Stated Meeting, June 23, 1876.

Dr. C. T. Poore read a report upon

ORTHOPÆDIC SURGERY AND ALLIED SUBJECTS,

in which he brought forward the literature upon the subject for the year 1875. In speaking of the case reported by Dr. Lewis A. Sayre, in which section of the latissimus dorsi muscle was divided for the purpose of assisting in the correction of lateral curvature, the doctor said it was no new operation, but that long ago muscles had been divided by Guérin, Malgaigne, and others, to rectify lateral curvature of the spine, but that the operation did not afford satisfactory results, and had been abandoned by English surgeons altogether. With regard to the use of the plaster-of-Paris jacket in the treatment of Pott's disease, Dr. Poore claimed that it was first used by Dr. Bryan in Bellevue Hospital prior to the date at which Dr. Sayre used it for the same purpose. The Association then adjourned.

Correspondence.

SUMMER RESORTS AND METROPOLITAN PRACTITIONERS.

To the Editor of The Medical Record.

Saratoga Springs, July 20, 1876.

Dear Sir:—I have been much interested in reading some extracts from the address of Dr. Sims, delivered before the American Medical Association at its late meeting, June 6th. Some points in this address have already been referred to in the columns of your valuable journal; and I solicit the favor of a space in the Record for some comments pertinent to the extracts I have read, and suggested by our professional surroundings in this place.

The portion of the address relating to the Code of Ethics is suggestive, and opens to view some points worthy of professional consideration and digestion. But that to which I desire to allude more particularly, is the portion where Dr. Sims says: "A gentleman high in the ranks of the profession, holding a distinguished position among us, wishing to change his place of residence, writes to me to know how he can notify the world of his intention, without violating the Code of Ethics; and he and a friend of his, a well-known stickler for the inviolability of the Code, hold grave consultations over the easiest way of getting round its provisions without a flagrant violation of them. These are honest and honorable men, and would not do anything wrong. But they feel that they are hampered by rules that are unjust and oppressive." Pardon me if I ask you, "Is the Code of Ethics up to the requirements of the times, when it compels honorable men to do dishonorable things to promote an honest action?"

The instance here mentioned, and the sentiment expressed, seem to bear so close a relation to circumstances transpiring in our midst, that I venture to state the coincidence, and express my regret that gentlemen are so hampered by the Code, and my surprise that we must be "dishonorable" while we are "honest."

To the members of the medical profession residing in this village, the question raised here has a special interest. The fact is well known to all that *the season* at Saratoga Springs brings hither a large number of visitors from all parts of the country, and during the summer months our population is almost doubled. With this increase of residents there is a proportionate increase in the demand for professional services; and recognizing this fact, it has of late years become the custom among certain gentlemen of the profession, residents of cities, where they have large and remunerative practices, to flock hither during the summer months, locate themselves at one of our large hotels, and secure all the professional business they can. They do not come for rest and relaxation from professional labors at home, but come with an eye to business, and lose no opportunity to publish their presence in our midst. Some—and I speak from actual knowledge—have this season applied to the proprietors of some of our larger hotels for the privilege of putting up *the shingle* in the office of the hotel as a special announcement of their presence and desire for patronage—a privilege, however, which was not granted. Another heralds his presence here by circulars and announcements in the journals, of the date of his coming and departure, and the case bears a striking resemblance to the instance alluded to by Dr. Sims, and quoted above. Others are here, making no announcement of their presence, but, as one remarked, desiring "to do business enough to pay expenses."

The regular profession of this place, residents of the village the year round, have looked with wondering eye at the practices resorted to by some of these gentlemen of high standing in the profession; and we ask in all candor, is this the part of professional courtesy, and are these gentlemen within the Code, or are they in that sad dilemma raised by "the requirements of the times," which "compels honorable men to do dishonorable things to promote an honest action?" We reside here not for the sake of local business alone, for the loaf is not large in proportion to our numbers, but with the view of meeting the demands made upon us by the cosmopolitan character of our summer population. This is the remunerative portion of our business, and we labor to fit ourselves for its requirements; and though looked upon by some as only types of the country doctor, profess to be not far behind our city brethren in the literature and journalism of our profession. Do the requirements of these gentlemen compel them to do this? Does the nature of this increase of our summer population deprive us, who labor in our professional walk here, of any claim upon it as a source of professional business? We have identified ourselves with this village in all its interests; we look to the hygienic and sanitary condition of our surroundings, that we may have no source of disease in our midst, and we bear our share of the burden of taxation, for all the means adopted for the improvement of our village; but, as these gentlemen assert by act, if not by word, you have no right, title, or claim to the professional business the character of your village, as a watering-place, may bring within your borders.

The Code of medical Ethics is not up to the requirements of these gentlemen, and they hold no grave consultation over the easiest way of getting round its provisions. I do not care to particularize; but pardon me for making the following query: Will the Code sustain any member of the profession, who, having ascertained that a gentleman lies ill in a neighboring hotel, under the care of one of our resident physicians, in sending to the patient his professional card, announcing his presence in the village, and where he can be found? Such an instance occurred here not many days ago.

We cannot consider these gentlemen as high-priests of the Code, for they do not hesitate to shock the moral sense of the profession by their irreverent treatment of it. They are sincere, if not honorable, in their purpose; and though the written Code may be far behind their requirements, there is an unwritten Code which appeals to the honor and honesty of every one who would consider himself a gentleman in the profession, of which they are equally regardless.

Yours respectfully,

M. C. E.

[Our correspondent takes a sensible view of the situation, and has a just cause for complaint.—Ed.]

THE MICHIGAN STATE MEDICAL SOCIETY AND HOMŒOPATHY.

To the Editor of The Medical Record.

Albion, Mich., July 19, 1876.

Sir:—Will you have the kindness to allow me a few words of comment upon a communication, printed in the Record of July 15, from Dr. Maclean, Professor of Surgery in the University of Michigan.

He wrote to correct what he considered to be a mistake in your report of the proceedings of the National Association, but has succeeded in making the only mistake in the case. I am from Michigan, was a delegate to the Association, and was present when Dr. Frothingham preferred his last charges.

The facts in the case are just these: In the first place, charges were preferred against the Michigan State Society and its delegates, by a gentleman of the Faculty at Ann Arbor. At first the delegates of the Michigan State Society were not allowed to register. The charges came at once before the Committee on Ethics, etc. This committee dismissed these charges and admitted the Michigan Delegates, Dr. Benham bringing his report to this effect while Dr. Atkinson was calling the roll. As soon as the applause was quieted after the reading of this report, Dr. Frothingham arose and preferred charges against Drs. Foster, Pratt, and G. K. Johnson only, and not against the Michigan State Society or the whole Michigan delegation, as Dr. Maclean states in his letter above referred to. It is understood that these charges are to the effect that these two gentlemen are guilty of a breach of ethics, and of unprofessional conduct, in that they once formed a part of a special committee appointed by the Michigan State Society, on Medical Legislation, and that they sat in joint committee with practitioners of both the Homœopathic and Eclectic schools, and that they, in connection with the whole joint committee, recommended to the State Legislature a bill to provide for a State Registration Board, which should be composed proportionately of Regular, Eclectic, and Homœopathic physicians. Of course if these gentlemen (Drs. Pratt and Johnson) are reprehensible, the State Society are equally so. Every intelligent man knows that there is a vast difference between the matter of registration of physicians and that of their education and graduation by a Medical Faculty.

But not to argue this point, permit me to say, that if our State Society or these gentlemen in particular, are in the wrong, we wish to know, and are willing and anxious to be set right.

Dr. Maclean says that interested and unscrupulous persons have endeavored to persuade the profession of the land that we, of this University Faculty, have been, and are, in the position of aiders and abettors in the graduation of homœopathic students.

Permit me to say, Mr. Editor, that it is the opinion of the profession of this State, that Dr. Maclean states the truth exactly, except in so far as he says that interested and unscrupulous persons have endeavored to "persuade" to this opinion. The profession have needed no persuasion in this matter. It is plain to all that the moment Dr. Maclean or Dr. Frothingham admitted to his lecture-room, or examined at the close of the lecture season, one who was known to be a registered homœopathic student, that "they of the University Faculty" were guilty of aiding and abetting the teaching of homœopathic students, and therefore, of their graduation. This talk of "standing in the breach, and preventing the country from being flooded with homœopathic students" may sound well to non-professional readers, but to the physicians of this State it is weak.

What the Michigan State Society desire above all else, is a "calm, full, and impartial investigation of these matters." And they propose to abide by the decision, whatever it may be.

In conclusion, let me say that the profession of this State have no ill-will towards the Medical Department of the University. Too many of them attended lectures and graduated there. We wish it well, and pray that it may soon shake off this seeming, at least, connection with sectarian medicine. It had been just as easy to have had the homœopathic department entirely separate and distinct from the regular school, and, indeed, such was contemplated by the State Legislature. It was the management of the regents that hybridized the two schools, that money might thus be saved to help a non-paying department of the University. But it now seems that the regents are gradually receding from their first action. Within a week two more homœopathic professors have been appointed at Ann Arbor, that of Obstetrics and Surgery. Let two more professors be appointed, so that the two schools may be as separate in *fact* as they are in *name*, and *then* all cause of complaint and misunderstanding will be gone. To satisfy all classes of people, and carry out the theory of "fair play" to its legitimate conclusion, we must ultimately see established at Ann Arbor, as a part of the University, a department of Eclectic (so-called) medicine, of Hydropathic, of Clairvoyant, and the Seventh-son system of medicine. All the different sectarian systems must at last be represented. The University may be thus lowered in the estimation of scientific men, and yet we shall find no fault.

One word more. As a matter of good taste, it would have been far better for the medical "University Faculty" to have maintained a dignified silence upon this "vexed question," and left the active championship of this "doubtful cause" to other gentlemen, if there are such in the profession, who sympathize with them in this matter.

Yours very truly,

JOHN P. STODDARD.

"PATENTED" VERSUS "PROPRIETARY."

TO THE EDITOR OF THE MEDICAL RECORD.

DEAR SIR:—Permit me, agreeable to your judicious invitation in the MEDICAL RECORD, to set down a few facts in regard to patents in medicine. Medical, and also pharmaceutical writers, speak of "patented articles" and "proprietary articles" in one strain, and rate them in one and the same category of vile and secret nostrums and quack medicines. This is evidently a confusion, out of want of knowledge of facts; because:

"*Proprietary Remedies.*"	"*Patented Remedies.*"
1. Are innumerable.	1. Only a few in existence.
2. Formulæ are kept secret.	2. Formulæ published; therefore not secret.
3. Generally they are good for everything.	3. They are of some therapeutic value.

These differences and distinctions are so positive and obvious, that the profession should not ignore them, and should certainly be disposed to make a due discrimination between them.

Most respectfully yours truly,

JULIUS FEHR, M.D.

HOBOKEN, N. J., July 28th, 1876.

PRELIMINARY MEDICAL EDUCATION.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—Harvard College has raised its standard of admission, and after September, 1877, will require of applicants a degree in letters or science from a recognized college or scientific school; or, in lieu thereof, a fair reading knowledge of Latin, French, or German; a respectable orthography, and a decent conception of English grammar.

Little enough this; but where is there a medical school, from Maine to Texas, that requires even so much of those that yearly swarm about their doors? Scandalous as it may seem, it will be allowed that I do not exaggerate in the assertion, that the majority of those who enter our medical schools from year to year would be unable to write and spell correctly ten consecutive lines of an ordinary letter. They will be ignorant of the proper place for a capital or punctuation-mark. With the expectation of dealing all their lives with Latin words and phrases, they will be unable to distinguish the nominative from the genitive case. They will be unable to define even the meaning of the phrases, 'natural, intellectual, and moral philosophy.' The chances are, that they will go through their whole professional career, if they pursue their object to the end, without having mastered more than the rudiments of medical science. Still speaking generally, a more ignorant set of men gather in no halls of learning than gape and titter in the amphitheatres of American Medical Colleges. From the plough and workshop, without any preliminaries, they have entered into studies that, from their very nature, require a firm foundation of previous intellectual training. That the necessary habits of systematic thought and study will be acquired, is, in most cases, out of the question. The wide and thorough general culture demanded of physicians, becomes, in their hands, narrowed down to the mere watching of symptoms and dispensing of drugs. Skilled perhaps in technicalities, standing well in the estimation of the ignorant, before men of intelligence they bring the whole profession into discredit. This irruption of illiterate men into what is claimed to be a learned and liberal calling, cannot be too much deprecated. Its best interests as a body, as well as those of its individual members, demand the highest talent and the most generous culture.

The physician who has started into the world with an inadequate mental culture, may attain eminence and an extensive and lucrative practice. So far as business and money-making is concerned, he may be entirely successful. He has a "sound judgment," general force and weight of character, a faculty of pleasing, persuading, and satisfying; fidelity, moral excellence, affinity, acuteness. He is "the fashion." The Great Public, wholly incapable of judging the relative merits of medical men, accepts him; and sees in his failures, not the insufficiency of the individual, but that of the whole profession.

The physician's high responsibilities are not alone confined to the weary couch of his patient, but extend to every walk and occupation in life. The broad scope of his intellectual culture should enable him to be the mentor of statesmen, the clergy, and educational corporations, whose opinion can command their respectful attention. Men pay little regard to the advice of those whom they regard as their intellectual inferiors. To obtain influence over the minds of others we must be able to cope with the best of them, and challenge their respect and confidence.

The question is asked, "Of what use is the Latin language as a preparation for the study of medicine?" Well, in the first place, a fair knowledge of Latin is pretty good evidence of one's general schooling. The possessor of a reading knowledge of Latin is inferentially tolerably well trained otherwise. The Latin language is the philological basis of scientific literature, and in fact of all literature. Many causes have contributed to this: the circumstance of its being a dead language (and thus not subject to change); its ready adaptability, its long use by the church of Rome and the priesthood, who were for centuries the possessors and sole guardians of science and literature. Those who fail to perceive the benefit to be derived from a knowledge of Latin, fancy they can see a very practical advantage in a knowledge of French and German, not as an intellect-opener—if I may be allowed the expression—but as something they can use in professional intercourse. As well claim the same advantage from a knowledge of music. I must assert that to an English-speaking person a thorough knowledge of English grammar is far preferable.

Harvard College requires and has required a three years' course; and now those seeking a diploma are obliged to pass a most searching examination in every branch of study. Contrary to what might be expected, there seems to be no falling off in the number of students applying for admission; and if other medical institutions would follow her good example in thus raising the standard of admission and graduation, they also would probably lose nothing, while the profession and the world at large would certainly be the better therefrom.

B. Pillsbury, M.D.,
Middletown, N. Y.

ARMY RANK.

To the Editor of The Medical Record.

Sir:—The views expressed by Dr. Rolleston before the Medical Council were intended to show that the *status* of English medical officers (like that of our own naval medical men) is not *de facto*, as in the army of the United States. In our army, the military title is given to all medical officers in their commissions, and they use it, and are addressed by it, socially and officially. The military title is indispensable to military and naval medical men, as it distinctly defines their military position in the services, and is the *only one* that is or will be acknowledged by the line or combatant branch. The title of "Surgeon-General," "Surgeon-Major," "Medical Inspector," etc., are not absolutely distinctive of rank or duty, and are distasteful to English medical officers, who see no reason why a *military* title should be given to *paymasters* and refused to them.

We have the same trouble in our navy, with its absurd "*relative*," or assimilated rank, which for fifty years has been the cause of all the heart-burnings of the staff.

The high rank accorded to English military and naval officers is like that of our navy—"*relative*," or assimilated—which is declared by the combatant branch to be a "*rank-humbug*."

Bogus.

AMERICAN MEDICAL ASSOCIATION.

To the Editor of The Medical Record.

Sir:—Referring to the remarks of your Philadelphia correspondent on the meeting of the American Medical Association, in your issue of the 24th ult., I can endorse his statement as to the excellent acoustic properties of "Horticultural Hall," with a large audience, such as Tyndall secured; but with the small number of delegates present on the 6th of June, and the very bad order maintained on that occasion, it was *impossible* to hear what was going on. I have been present at a good many medical meetings at home and abroad, and I am sorry to say that I never was at one where there was less dignity and decorum than at Philadelphia; in fact, from the time of registration to the

hour of adjournment, the whole affair was more like a political meeting than a dignified professional gathering.

The wholesale manufacture of delegates into permanent members—merely because they are State delegates—appears to be wrong; in this way the State societies really make their delegates members of the American Medical Association; whereas, if we are to consider such membership an *honor*, the Association should make its own selection from the leading medical men of the country.

'Απλοτης.

Reviews and Notices of Books.

Cyclopædia of the Practice of Medicine. Edited by Dr. H. von Ziemssen. Vol. IV. *Diseases of the Respiratory Organs.* By Dr. Fraenkel, of Berlin; Prof. von Ziemssen, of Munich; Prof. Steiner, of Prague; Dr. Riegel, of Cologne; and Dr. Frantzel, of Berlin. Albert H. Buck, M.D., New York, Editor of American Edition. 8vo, pp. 805. New York: William Wood & Co. 1876.

The volume before us, although but fourth in number, is the most recent one of the series issued in this country. Evidently, therefore, its appearance in Germany must have been considerably delayed. On turning over its many pages, and observing the number and character of the subjects therein discussed, one cannot but regret that some of the authors had not improved a part of their time in abbreviating and condensing their papers. The only two articles not deserving this criticism are that of Fraenkel on Diseases of the Nose, which is thoroughly practical; and that of Steiner on Croup, which is short and clear cut, and, being admirably translated, is the most readable essay in the book.

The first ninety-eight pages of this volume are occupied with the General Diagnosis of Diseases of the Nose, Pharynx, and Larynx, by Dr. Fraenkel. The subject is ably handled and the ground amply covered, more so, in fact, than in many works devoted to the specialties herein considered. The different methods of illumination, the combinations of concave mirrors and lenses, as well as all the photometric measurements and mathematics of optics pertaining thereto, are discussed at considerable length, while still the author gives to the discussion the practical stamp of the clinician.

The second section, on Diseases of the Nose, also by Dr. Fraenkel, covers eighty-two pages, and will interest the general practitioner, as furnishing much valuable information on a class of cases often met in practice, and with regard to which our general treatises are almost silent. It is true that Fraenkel does not solve the problem of how to cure a "cold in the head," but he does give us some fixed points on the subject of Purulent Nasal Catarrh, as well as the more common Chronic Catarrh, or Ozæna. In this connection we are informed that acute rhinitis *may* pass into the chronic form, "and yet, in the vast majority of cases, this only takes place in persons suffering under a dyscrasia,"—especially under the effects of scrofula or syphilis. Nothing new is advanced in the way of treatment, but the author urges the importance of physicians no longer neglecting or making light of cases of sub-acute or chronic nasal catarrh in children. Considerable space is given to the consideration of Epistaxis, while abscesses, ulcerations, tumors, foreign bodies, and parasites of the nasal cavity are more briefly disposed of.

Prof. von Ziemssen himself furnishes the introduction to Diseases of the Larynx, together with brief sections on Anæmia, Hyperæmia, Hemorrhage, Abnormal Color, and the Catarrhal Inflammations of the Laryngeal Mucous Membrane. The acute and chronic inflammations of the larynx is the only part of this that is of much interest. The distinction between acute laryngitis, in the form of pseudo-croup in children, and true croup, is made prominent. The writer also insists that every laryngeal affection, even the most trifling, should be followed up laryngoscopically. The treatment of chronic laryngitis, besides the avoidance of its causes, is mainly local, by inhalations of tannin, nitrate of silver, etc.

Prof. Steiner, of Prague, is already favorably known to the English reading medical public by his Compendium of Children's Diseases, a translation of which has been published in England and in this country. His article on Croup, like all that he writes, is short, clear, and practical, and is of special interest just now, when the question of the identity of croup and diphtheria is attracting renewed attention.

Apropos of this discussion, we are told that "the attempt to distinguish croup and diphtheria as two entirely distinct diseases has been unsuccessful, both from an anatomical and a clinical standpoint; indeed there are many good reasons for supposing that these two affections are only varieties and modifications of one and the same process." And yet a little later he says: "Another secondary form of croup, and one which is justly to be feared, is that which often accompanies epidemic diphtheria." It will be seen, on reflection, that the two statements are not necessarily contradictory of each other.

Steiner opposes the view of Niemeyer and others that dyspnœa, in croup, is caused also and mainly by paralysis of the laryngeal muscles. Croupous tracheo-bronchitis is mentioned as one of the most frequent and dangerous complications of the laryngeal disease. In cases that progress but slowly this may not arise till late, and when tracheotomy has been performed the author has often satisfied himself that there were no signs of bronchitis until two or three days after the operation.

In speaking of the histology of the croupous exudation, he agrees with E. Wagner that "there is no sharp dividing line between diphtheria and croup," but does not adhere to the rest of Wagner's views as to the production, in both of these affections, of a network resulting from a peculiar metamorphosis of epithelial cells. On the other hand, he considers that the views of Oertel, Klebs, Laycock, Wade, and others, who believe they have discovered the nature of the croupous diphtheritic exudation in the generation of fungi, to be equally untenable.

In the way of *treatment*, early and persistent application of milder remedies is especially advocated. Frequent gargling, or pencilling the throat with equal parts of lime water and distilled water, or with a solution of chlorate of potassa, twelve to sixteen grains to the ounce for children, and a drachm to the ounce for adults, is advised. Where this is impracticable or without result, touching with lunar caustic, or with a strong solution (two drachms to the ounce) of nitrate of silver, may be tried. For local application the author also mentions chromic acid, tincture of iodine, hydrochloric and lactic acids, sublimed sulphur, and chloride of iron, but has found

none so efficacious as those first mentioned, especially lime water. He is opposed to the use of calomel; considers emetics to be of value only by their mechanical effect, and advocates early tracheotomy. In performing this operation, for croup, he fears the use of chloroform. As before stated, Prof. Steiner's essay on Croup is, in our opinion, the best thing in the book, and is an interesting and most valuable contribution to the literature of this subject.

The remaining five-eighths of the volume (500 pages) are about equally divided between Dr. Riegel, of Cologne, and Dr. Fraentzel, of Berlin, the former writing on Diseases of the Trachea and Bronchi, and the latter on Diseases of the Pleura. They have neither of them, as yet, acquired the gift of brevity.

In Dr. Riegel's prefatory remarks may be found a valuable résumé of what is known with regard to the origin of cough, or the comparative susceptibility to irritants of different parts of the respiratory apparatus. The question of the influence of climate on the production of bronchial catarrh is ably handled, nor is the etiological significance of dust inhalation lost sight of. The sections devoted to the diagnosis of different forms of bronchitis are full and very satisfactory, amply repaying their careful study. In view of the rarity of their occurrence and the small amount of positive information given thereon, far too much space, in our opinion, is devoted to such subjects as Croupous Bronchitis, Stenosis of the Trachea and Bronchi, and Foreign Bodies in the Trachea. Those practitioners whose lives have been made a burden by the care of asthmatic patients whom they could neither cure nor kill will be interested in the able and exhaustive section on the Etiology and Pathogenesis of Bronchial Asthma. Unhappily nothing new is advanced in the way of treatment.

Dr. Fraentzel's paper on Diseases of the Pleura is long and heavy. The anatomical part of it is good.

Then follow forty-five pages on Symptomatology, and forty-eight pages on Treatment. If any future President of the American Medical Association is tempted again to accuse the Germans of being *nihilists* let him first read these forty-eight page s of treatment.

Venesection—6½ to 9½ ounces—is only recommended where there is very high fever and rapidly increasing effusion. Eight to twelve wet cups are better, or, in children, leeches. Digitalis and calomel, in grain doses, are given till the pulse is lowered or salivation forbids. Mercurial inunction is advised, also dry cupping, blistering, sinapisms, flying blisters, and iodine paint. The use of cold or of large doses of quinine is not recommended. Excellent results are claimed for drastic cathartics when the inflammation has reached its height. The author is decidedly in favor of puncturing the thorax and removing fluids by aspiration, whenever they fail to be absorbed or are doing serious harm. He gives due credit to Dr. Bowditch, of Boston, for having revived and introduced the operation of paracentesis.

On the whole, the fourth volume of the Cyclopædia is a valuable and interesting one; and if we are a little annoyed at the prolixity of some of its contributors, we must remember that all the articles in such a work as this cannot come from the master pen of a Liebermeister or a Juergensen.

The Mortuary Record of The Mutual Life Insurance Company of New York.

The combined mortuary reports of the Medical and Actuarial bureaus of the Mutual Life Insurance Company of New York, have been submitted to us through the kindness of the Medical Director of the above-named Company.

The volume is elegantly gotten up on tinted paper, full morocco binding, and is beautifully illustrated with elaborate colored tables and diagrams.

The experience which it sets forth is derived from a careful study of all the records of the Company, from its inception to the beginning of 1874, more than thirty years.

During that time the Company has been exposed to loss on 101,967 lives of different individuals, who have lived as members of the Company, a duration of time aggregating 578,112¼ years.

Out of this vast army of insured, 5385 deaths have occurred—something over five per cent.—a most reasonable mortality certainly. We are somewhat surprised, however, to see the large percentage of deaths that has occurred among those who were only on their first year of insurance—over ten per cent. of the losses thus happening. This, it seems to us, is a very large percentage; and reasoning from it, we must conclude that the average low mortality of the Company is due, *not only* to the care exercised in the selection of risks, but also to a combination of many favoring circumstances. Among the causes which are charged with these early deaths, "cancer and alcoholism" show a larger percentage in the first year than in several subsequent years. We can understand how this might be the case with the latter of the two causes—alcoholism—as many a *magnificent wreck* from drink can, by a little *fixing up*, be made to still present an *appearance* of even *robustness*; but we cannot see how it could be so with cancer; nevertheless, there it stands as a *fact*, and as such the report honestly states it. In the case of consumption, the value of medical selection is apparent, as the percentage of deaths from this cause during the first year is much smaller than in the subsequent years, when the advantages of selection pass naturally and rapidly away.

The value of good medical selection is also very well illustrated in "kidney diseases," including Bright's disease, where the percentage of deaths during the earlier years is very small indeed, being only 1.87 per cent. for the first year; whereas, further on, it rises to 6.57 per cent. Of suicides, on the other hand, out of the 59 instances reported, 13 occurred during the first year of insurance—over 22 per cent.—showing that to the average medical observer this "coming event," at least, "casts but little shadow before."

Of the 38 deaths from small-pox, half occurred during the recent epidemic, teaching very clearly, we think, the necessity of a better appreciation of the preventive effects of revaccination among the people at large.

In speaking of phthisis, the medical director calls attention to the fact, that the disease is *not* one which is *confined* to the *younger periods* of life; though it is generally so considered, not only by the laity, but by physicians. The experience of that Company shows that, while 525 deaths occurred from phthisis in individuals *under* 40 years of age, there were also about 400 deaths from the same cause in those who had passed 40 years. This is a point for Life Insurance underwriters to consider carefully.

Old age comes in for but a small showing, only 13 deaths from this cause being cited. Every decade hereafter will, no doubt, rapidly swell the numbers of this class.

As to the influences of nationality on the different causes of death, we have some interesting facts: for instance, *strong drink* showed itself *strongest* among

the English and Irish, and *weakest* among the phlegmatic and lager-loving Teutons.

Scotchmen seem most easily to fall victims to apoplexy and diseases of the nervous system, while the Irish fight most shy of them.

Scotchmen are also most liable to diseases of the kidneys (has oatmeal anything to do with it, we wonder?); but, however that may be, the Scotch and Irish *know better than to commit suicide*, for *not one* case comes from among them.

The Irish contribute the largest number to consumption; and their neighbors, the English, the least; while diseases of the circulatory system and accidents are equally distributed to all nationalities. As between foreign and native-born subjects, the foreign show an excess of ten per cent. over natives in deaths from cancerous disease.

LECTURES ON SYPHILIS AND ON SOME FORMS OF LOCAL DISEASE AFFECTING PRINCIPALLY THE ORGANS OF GENERATION. By HENRY LEE, Professor of Surgery in the Royal College of Surgeons of England. Philadelphia: H. C. Lea, 1875.

THESE lectures are, like all the writings of this author, disappointing. In reading this work, one is forced to the conviction that its author is not clear and precise as to many of his views of syphilis. Indeed, if the whole scope of these lectures is considered, the question forcibly arises, are they such as one could expect from the professor of surgery in the Royal College of Surgeons of England, and particularly are they worthy of delivery before such a learned body as the Hunterian Society? Both of these questions must be answered decidedly in the negative. It is certain that, had a man of less fame or a previously unknown author published these lectures, they would have, on account of their lack of grasp of the subject and of its inadequate treatment, consigned him to a low rank in literature. The author labors to call attention, as he says, to certain doctrines of Hunter, which he thinks deserve more prominence than they have heretofore received; but he has so far mixed matters that we have to return to our recollections of Hunter, to know which is his view and which that of Lee. The chapter on blood inoculation is a long and labored one, and in the end does not bring the question out in a clear and practical manner. We find in this work, as in all that Lee writes, the term adhesive inflammation for what is really cell-infiltration. Certainly in this late day, the proliferative processes of syphilis being so well understood, should not be thus called. Again, in describing syphilitic papules we find the author still uses that bad term syphilitic lichen, which for various reasons is inappropriate and unscientific. Still further, the author indulges in new and unnecessary names, as we find that he terms the inguinal glands, when syphilitic, amygdaloid, simply because they in, syphilitic persons, sometimes feel like almonds under the skin. We shall stop here, though many other minor faults are observed. There are, however, certain good points in the work; the remarks on syphilization and on the inoculation of various morbid discharges are evidently based on extended and careful study. No less interesting are the portions relating to the treatment of syphilis, in which, as of old, the author advocates the mercurial vapor bath, and comes out as a strong advocate of the use of mercury in syphilis. It must be confessed, however, that these good points are so few and unoriginal that they do not by any means counterbalance the shortcomings, both general and special, of the work. To a person who has already studied syphilis, the work will be a disappointment; and those who commence its study would do well to thoroughly avoid the book, as it inculcates such errors as would materially embarrass future study and observation.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from July 30th to August 5th, 1876.

BY S. O. 69, A. G. O. July 26, 1876, the following promotions and appointments in the Medical Department are made:—

PROMOTIONS.

To be Surgeon with the rank of Major: J. J. Woodward, Wm. H. Forwood, Ely McClellan, S. A. Storrow, W. D. Wolverton, A. Hartsuff, C. R. Greenleaf, J. V. D. Middleton, J. H. Janeway, H. R. Tilton, S. M. Horton, J. C. G. Happersett.

APPOINTMENTS.

To be Surgeon with the rank of Colonel: Robt. Murray, Chas. Sutherland, J. J. B. Wright, J. M. Cuyler.

To be Assistant Medical Purveyor with the rank of Lieut.-Colonel: Chas. McCormick, C. H. Laub.

To be Surgeon with the rank of Lieut.-Colonel: Wm. J. Sloan, W. S. King, Jas. Simons, C. C. Keeney, J. F. Head, L. A. Edwards, J. F. Hammond, E. J. Baily.

ROSE, G. S., Asst. Surgeon. Granted leave of absence for one month. S. O. 146, Mil. Division of the Atlantic, Aug. 1, 1876.

SEMIG, B. G., Asst. Surgeon. Leave of absence further extended one month. S. O. 153, A. G. O., July 28, 1876.

BEALL, GEO. T., Medical Storekeeper. Granted leave of absence for one month. S. O. 154, A. G. O., July 29, 1876.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending August 5, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
July 29.....	0	12	8	2	6	36	2
Aug. 5.....	0	4	7	2	4	20	1

RESTRAINT FOR CHRONIC INSANE.—Dr. A. M. Shew, Superintendent of the Connecticut Hospital for the Insane, in his Tenth Annual Report, says:—"Admitting the usefulness of restraint in certain cases, I desire to protest against the tendency to use it in ordinary cases of chronic insanity where employment, diversion, and watching would obviate the necessity for it. In this respect we have made great progress during the past year. On the first of November last, with a

population of two hundred and twenty-five male patients, only two were subjected to any form of mechanical restraint; one had his hands in a leather muff to prevent the removal of bandages from his leg; the other wore a camisole waist a part of the time to keep him from destroying his clothing. During the past three months these two men have been without restraint, and we have actually conducted the hospital on the male side on the non-restraint plan. I am under obligations to the officers and attendants who have taken so much pains to further efforts in this direction. Much of its success depends upon the character of the attendants having immediate charge of the wards. Kindness, regularity, and watchful attention are efficient qualities in this direction. The great want in every hospital is occupation; patients who are in suitable condition to do so go out with a sense of relief to farm work, to the kitchen, laundry or sewing room, and regard the change as diversion. The object in setting a patient to work is not that he may repay cost of treatment, but it is to aid him in casting aside fancies and in returning to healthy feelings and thoughts."

The Origin of Evil.—How often are the most important truths brought to light from sources the least expected. For ages the scientists, philosophers, and theologians have been seeking to discover the origin of "evil," otherwise the "devil," without coming to any satisfactory conclusion, when, lo! his sable majesty's nativity has been suddenly brought to light by an obscure and hitherto almost unknown tribe of savages, inhabiting a cold and almost inaccessible region.

The London *National Reformer* says:

"It is stated that Terra del Fuego has been traversed by Lieut. Masters, R.N., who has discovered that the natives believe in devils, and that they are the departed spirits of members of the medical profession. The main object of their religious ceremony is to keep these devils at a distance from them.

Classification of Amputations for Injury.—Prof. Verneuil complains of the confusion that exists among surgical authorities with regard to the classification of amputations for injury, according to the time when the operation is performed. Most surgeons recognize only two divisions, viz.: primary or immediate, and secondary or consecutive; but many make three periods. The Professor thinks that the more natural and satisfactory division is into three periods, and he proposes that these periods should be denominated the antepyretic, the intrapyretic, and the metapyretic. The operation in the second period is very dangerous, and should be put off as long as possible, and only performed when the fever is declining. The metapyretic period, or in other words the period of suppuration, begins with the subsidence of the fever, and may last for months or years.

Castor-Oil.—This nauseous drug can be easily taken, when administered in the following way: The glass should be first rinsed with moderately hot water, and then two drachms of hot water, one ounce of castor-oil and one drachm of peppermint water, put in in the order mentioned. This is easily swallowed, and leaves hardly any taste of the oil in the mouth.

Morphia in Sea-Sickness.—Dr. Dillard recommends subcutaneous injections of morphia in the epigastric region for this affection. He used the remedy in two cases, and in both the distressing nausea and other symptoms were relieved in about fifteen minutes, and did not recur. The dose used was five minims of Magendie's solution.

Poisoned Meat.—Prof. Bouchardat, of Paris, recently analyzed the yellow coloring of the cover of a ham, imported from Cincinnati, and found it composed of chromate of lead, a deadly poison.

Hydrophobia.—A case of rabies is reported by the *Veterinary Journal* (July) cured by the hypodermic injection of "less than half a grain of the woorara."

A Button thrown up two Years after being Swallowed.—Dr. Roth related at the Medical Society of Strasburg, the case of a child, three years old, who vomited a button two years after it had been swallowed.

Death from Chloroform.—Another death from chloroform is reported. The occasion was the removal of a fibrous tumor from the palate of a robust and healthy man, aged forty-five years, a patient of St. Mary's Hospital, London. The patient refused to submit to the operation without an anæsthetic, and before he was fully under the influence of chloroform death took place.

The International Congress of Ophthalmology will be held in Chickering Hall, Fifth avenue, on Tuesday, Wednesday, and Thursday, September 12th, 13th, and 14th. On Tuesday, from 12 M. until 1.30 P.M.; in the afternoon, from 3 until 5. On Wednesday and Thursday: in the morning, from 10.30 to 1 P.M.; in the afternoon, from 3 to 5. Candidates for membership will present their names to Drs. Derby or Gruening, at Chickering Hall, on the Monday preceding, at 10 or 3 o'clock, or on the morning of the meeting. The membership fee is $3, including a copy of the reports; without reports, $2. Those who have already subscribed to the expenses of the Congress will be exempt from these payments. The discussions are open to the profession. No paper must exceed fifteen minutes in reading, and no subsequent speech must exceed five minutes. No member must speak more than once upon the same subject, except by permission of the house. A dinner will be given to the foreign members of the Congress by the American Ophthalmological Society, on Thursday evening, September 14th, at Delmonico's. Tickets may be procured on registration.

American Dermatological Association.—At an informal meeting of Dermatologists, held in Philadelphia, at the rooms of the Section of Practical Medicine, of the American Medical Association, Wednesday, June 7th, 1876, after the election of a chairman and Secretary pro tem., it was *Resolved* to call upon such American physicians as had evinced a special interest in dermatology, to unite in forming an American Dermatological Association; *Resolved*, that the meeting for organization be held in the University of Pennsylvania, Philadelphia, on Wednesday, September 8th, 1876, at 6 P.M., or immediately after the close of the meeting of the Section of Dermatology and Syphilology of the International Medical Congress, on that day.

Prof. Joseph Lister and Argyll Robertson, about to visit this country, will represent the Medico-Chirurgical Society of Edinburgh at the International Congress. Mr. William Adams, President, and Mr. Richard Davy, Surgical Secretary, Medical Society of London, will arrive in New York by the *Scythia* on the 15th of August.

Original Communications.

THE INFLUENCE OF NEURALGIA OF THE TRIGEMINUS IN CAUSING IRITIS AND CHOROIDITIS, AND ITS PATHOLOGICAL SIGNIFICANCE.

By CHARLES S. BULL, A.M., M.D.,

OPHTHALMIC SURGEON TO CHARITY HOSPITAL, ASSISTANT SURGEON TO THE NEW YORK EYE INFIRMARY.

For more than a year past my attention has been attracted by certain phenomena of a nervous nature, in connection with iritis and choroiditis, which seem to me to illustrate the intimate connection which exists between neuralgia of the trigeminus and intraocular inflammation, when involving the iris and choroid; and the two forms of disease, neuritis of one or more branches of the fifth nerve, on the one hand, and intercurrent iritis or choroiditis, on the other, I think bear the relation to each other of cause and effect. This view I have been induced to consider highly probable, from my own observation of seven cases.

The pathology of the trigeminus is still very obscure, and investigators are still groping in the dark, or in what, at best, is a very subdued light, for some slight ray that may help their footsteps along in the right direction towards a full comprehension of the subject.

Clinical facts are what we all need, either in advocating or opposing a theory, and, therefore, to the broad field of clinical observation must we look for aid in elucidating the difficulties which overhang still a very important subject. Neuralgia of the trigeminus is an affection of great interest, not only on account of its frequent occurrence and obstinate resistance to treatment, but also on account of its connection with other lesions, which are sometimes of a most intricate nature. Many pages have been written upon the single subject of herpes zoster ophthalmicus, in connection with neuralgia of different branches of the supraorbital and infraorbital nerves, and a great deal of valuable time and arduous labor spent in attempting to account satisfactorily for the occurrence of necrotic inflammation of the cornea and iris, which is met with in this disease.

Neuralgia of the fifth nerve is usually complicated with secondary affections of other nerves, which are intimately connected with those that are the original seat of the pain. When the pain in the nerve is the result of direct injury to the nerve trunk, whether by external violence, by the mechanical pressure of a tumor, or by the nerve becoming involved in some inflammatory or ulcerative process, the general condition of the patient produces scarcely any effect. In general migraine it is a well-known fact that the pain spreads to every terminal branch of the ophthalmic division, the eye on the affected side is deeply injected, there is lachrymation, photophobia and partial ptosis, with occasional spasmodic contractions of the orbicular muscle, and cloudy vision.

In a tabulated report of 128 cases of neuralgia of the fifth nerve in the *Arch. Gén. de Médecine*, Notta says that the retina was completely or almost paralyzed in ten cases; there was dilatation of the conjunctival vessels in 31 cases; permanent tonic spasm, not due to photophobia, in four cases; paralysis of the third nerve, causing ptosis, in six cases; and divergent strabismus in three cases. The pupil was dilated in three cases, and contracted in two cases, without impaired vision. In three others there was a dilated pupil with impaired vision. He also mentions among the complications, glaucoma and ulceration of the cornea.

Now the relations of the fifth nerve to so important an organ as the eye, tend to call our attention strongly to the phenomena that accompany its morbid conditions. Not merely the circulation of the parts supplied by this nerve becomes affected, but also the nutrition of the tissues. Anstie tells us that the periosteum of bone and the fibrous fasciæ in the neighborhood of the painful points not unfrequently take on a condition of subacute inflammation, with marked thickening and tenderness on pressure. He considers also that glaucoma is in many cases of nervous origin, and in this opinion all ophthalmologists will coincide. In regard to this subject, Bowman first called attention to the interesting fact that in certain glaucomatous conditions, there occurs a rapid change in the intraocular pressure; sometimes an increase, at others a decrease. The anomalies of tension are generally transient and of a varying nature. Of course we leave out of consideration all those conditions described as atrophy of the eyeball, in which the softness of the globe depends on disorganization of the tissues and an altered intraocular circulation. We are still very ignorant of the physiological conditions which are here concerned. The hypotonia, or loss of tension, is constantly associated with contraction of the pupil. The patient complains of a dull pain in the eye, or of stabbing pains in the orbit, and in many cases there is violent neuralgia, which often merges into migraine. The spontaneous neuralgic pains generally occur periodically, often accompanied by injection of the conjunctiva and lachrymation. During this rapid change of tension, we should always carefully note the relation existing between the hypotonia and the size of the pupil; when the pupil is narrowest the eye is the softest, and the neuralgia generally the most severe. The hypotonia is very often accompanied by slight chemosis of the conjunctiva and by small, delicate vesicles or phlyctænulæ. Another symptom is the local change of temperature, generally an increase, though occasionally a diminution has been observed. There is also congestion of the corresponding half of the face, and hyperæmia and swelling of the nasal mucous membrane. These cases differ from one another in the prominence of the individual symptoms; in one there are merely changes in tension, in another there is increase of temperature, while in a third the functional symptoms are the most important. *Jonathan Hutchinson* has written much upon the subject in the published reports of the Moorfields Ophthalmic Hospital, and he has come to the following conclusions:

1st. The whole subject of reflex paralysis and reflex disturbance of nutrition is obscure and difficult of satisfactory proof. In some cases it is not at all certain that a central disease does not exist, to which both the lesion of sensation and the lesion of nutrition are alike due.

2d. In many cases the changes are probably due to influences exerted through the vaso-motor nerves only, by which are induced alterations of the blood supply to the affected part.

3d. It is, however, probable that nutritive alterations may be induced through the nervous system independently of any primary change in the calibre of the blood-vessels.

He cites, in detail, 17 cases, one of which was glaucoma of one eye, occurring during a severe attack of neuralgia of the fifth nerve.

Comparatively recent investigations have proven that the phenomena of recurrent sensibility occur in almost all nerves. It is tolerably rare in neuralgia to find the whole of the nerve-trunk the seat of pain. The pain is commonly referred to certain limited spots, pressure upon which will at once induce it. As *Valleix* first pointed out, the most superficial nerves are principally affected, and their points of emergence on the surface the chief seats of pain. *Arloing* and *Tripier* proved experimentally that all nerves—motor, sensitive, and sensory-motor—possess recurrent fibres, which become more numerous as the nerve approaches the periphery, and decrease in number as we go back towards the centre, until they finally disappear altogether. As these recurrent fibres have never been seen to terminate in the thickness of the nerve-bundles, they may be assumed, from the characters noted, to end at different points in the tissues adjoining nerve-trunks or their branches. It is these fibres that, in certain cases of neuralgia, would be affected by morbific agents, which may possibly explain the occurrence of the isolated painful spots on nerve-trunks and their branches. Another argument in favor of this hypothesis, *Arloing* and *Tripier* find in the diminution, or even total disappearance of these fibres above the points indicated by *Valleix*, as the special seats of neuralgic pain. It would be erroneous to assert that these fibres are alone affected in neuralgia; yet equally far from the truth to state that spontaneous neuralgia follows the course of the nerve. They also consider it supposable that the morbid agency acts at once, both on direct and recurrent fibres; consequently if we examine the mode of extension of the neuralgia, from the disordered nerve to one that is sound, an additional argument for their theory is afforded. It is certain that extension very often takes place through the medium of the nerve centres, as is exemplified in the frequent coincidence of trifacial neuralgia, with pain in the cervical nerves. In trifacial neuralgia, it is not uncommon for the pain to glance from the ophthalmic branch to the mastoid process, and upper part of the neck.

In cases of traumatic neuralgia, it is impossible accurately to determine always the amount of nerve lesion in individual cases, and hence it is not always possible to study the relation between the extent of nerve injury and the amount of consequent shock.

It might be supposed from the frequent occurrence of injuries to the eyeball and orbital margins, that wounds of the infraorbital and supraorbital nerves would be not uncommon accidents; but this is not so. They are sufficiently rare, though they do occur. *Weir Mitchell* has seen severe neuralgia of these nerves, where both had been contused by a single blow from the head of a cane.

Charcot mentions the case of a man, who after receiving a violent blow upon the side of the head, which fractured the outer table of the parietal and adjoining portion of the frontal bone, complained of constant, violent pain in the branches of the frontal and occipital nerves. Later, the neuralgia became localized in the right eye, orbit, and ear; the eye became red and prominent; the conjunctiva œdematous, and the upper lid paralyzed. The cornea was hazy, and there was iritis with synechiæ.

Perhaps the most curious and interesting feature of these cases of iritis and choroiditis, is the strange variations in intraocular pressure, and their connection with the activity of the inflammation and the severity of the neuralgia. Close observation of the seven cases which I have been able to follow out, have led me to the conclusion that, as a rule, the beginning of the pain leads to a slight diminution of tension, which rapidly becomes more marked as the inflammatory action proceeds, and is lowest when the latter has reached its height. Without entering upon a discussion of the subject of intraocular pressure, let me say a few words in regard to the influence of the fifth nerve.

By irritating the medulla at the deep origin of the fifth nerve, the intraocular pressure is always increased, and lasts some time after cessation of the irritation. The result of irritation of the fifth is always the same, whether the cervical sympathetic was previously divided or not. The explanation is probably as follows: The first cause of increased tension is an active dilatation of the blood-vessels of the choroid and iris; the fact that the irritation of the fifth nerve increases the tension, even after evacuation of the aqueous humor, proves that a secretion or transudation of the ocular fluids occurs somewhere during this irritation. It is further proved by another experiment; if we divide the spinal cord between the occiput and the third cervical vertebra, no considerable increase of intraocular tension is produced, but when the fifth nerve is irritated in the same nimal, there is.

A final legitimate conclusion may be stated somewhat as follows: In some way, either peripherically or centrally, the trigeminus is irritated; as the immediate result, there occurs a slight increase of intraocular tension, caused by increased secretion of fluid in the posterior segment of the eyeball, by which the iris and lens are pushed forward; by the pulling of the zonula upon the latter, a new irritation is set up, which again acts on the secretory nerves, and, of course, causes an increase of tension. As a secondary result of the pressure, the points of exit of the venæ vorticosæ are narrowed, and we get disturbance of the circulation. But the cause of the intercurrent inflammatory action is still undecided and obscure.

As a résumé of still later investigations of *Hippel* and *Grünhagen*, the following may be offered: The trigeminus, by dilatation of the vessels of the iris and choroid, and by diminution of the resistance to osmosis, can cause an increase of the intraocular pressure. The sympathetic, as the specific ocular nerve, when irritated at the superior cervical ganglion, causes diminution of the intraocular tension. In the history of glaucomatous cases, as well as of those of essential phthisis bulbi, there is an irritated state of the ciliary nerves. Now since all sensory nerves stand in reflex connection with the vaso-motor nerves in general, and particularly with those of the eye, the irritated condition of the ciliary nerves may easily extend to the vaso-motor nerves of the eye, and may induce periodically or permanently contraction of the blood-vessels, a lessened supply of blood, and a consequent diminution of the tension of the eye. This I hold to be the explanation of the phenomenon of diminished tension which occurred in all the cases of iritis and choroiditis which formed the basis for this paper. In all of them it was present, and in most of them very marked, and always showed an intimate connection with the state of the pupil and the degree of inflammatory action.

It is well known that, in the majority of cases, the affections of the eye, which occur simultaneously with, or subsequent to neuralgia of the peripherical branches of the trigeminus, consist in periorbital neuralgia, accommodative asthenopia, spasms of the orbicular and facial muscles, and the more serious lesions of the cornea and conjunctiva. We also know that

these attacks of neuralgia are due to an inflammation of one or more of the terminal twigs of the ophthalmic division of the fifth. Now it is a matter of experience that the supraorbital or frontal branch is the most often inflamed, and the neuralgia is very often characterized by evening exacerbations. *Galezowski* cites a remarkable case of this kind of neuralgia in a patient from whom he had removed one eye three years before for hemorrhagic glaucoma, and had done an iridectomy in the other for chronic glaucoma. In this eye vision was restored and remained good for three years. He was then attacked by periodical neuralgia of the orbital margins, which was very violent; the eye became red, and vision was considerably impaired. *Galezowski*, at first, thought that it was a return of the glaucoma, but a closer examination showed that the disturbed vision was due to excessive lachrymation, and the case proved to be a true neuritis of the supraorbital nerve, which he cured by a succession of blisters.

If this frontal neuritis is not arrested, and if the neuralgic symptoms are prolonged during weeks and months, there result, very often, spasmodic contractions of the muscles of the face and lids. Here the case becomes more serious, and we must resort to subcutaneous division of the supraorbital and infraorbital nerves, and even to an exsection of a portion of them.

Some authors are inclined to believe that if the inflammatory action affects the peripheral twig, the eye complications are very superficial, are most often purely neuralgic and rarely inflammatory; and that the more serious lesions of the iris and choroid are only met with when a deeper portion of the trigeminus is involved, viz. the ganglion of Gasser; and that when a cerebral lesion is at the bottom of the trouble, there is such an alteration in the nutritive centres of the eye that the most serious results are here met with. This reasoning I believe to be faulty, for cases of grave choroidal lesion certainly do occur where vision is practically abolished, where there is surely no cerebral lesion present, nor even any suspicion of one, but where the intraocular trouble is due solely to peripheral irritation.

In glancing over the current ophthalmic literature of the past few years we are surprised to find how few cases there are published of grave lesion following neuralgic affections of the fifth nerve; and still more rare are those cases which are not glaucomatous, in which there is a *diminution* of tension associated with iritis or irido-choroiditis.

In the Transactions of the American Ophthalmological Society for 1870, Roosa mentions a case of conjunctival and corneal lesion with partial ptosis, in which, for nine months, there occurred every week with great regularity conjunctival injection of one eye with neuralgia, both ciliary and frontal, contraction and sluggishness of the pupil, lachrymation and diminution of tension. Only the ocular conjunctiva was injected, especially on the nasal side, but there were never any signs of herpes. The attack lasted several hours, and no treatment was of much use. After nine months the attacks became rarer, and finally ceased.

Noyes somewhere reports a case of monolateral herpes zoster ophthalmicus with bilateral blindness, which is of interest in view of the immediate cause of the loss of vision. There was the usual eruption on the left side of the face, accompanied by very violent and continuous neuralgia of the same side. The *left* eye became blind during the attack, but not from ulceration of the cornea. Ten months later the right eye became inflamed and vision was lost, just as the left one was, from irido-choroiditis, without any eruption on the right side of the face.

It may seem to some that seven cases are far too few to draw conclusions from, but we certainly can learn something from a careful observation of even this small number. In five of the cases, the patients had been neuralgic for a number of years, and in one of these since early childhood. Two cases were of traumatic origin; that is, the neuralgia was caused by direct injury to the nerve branches, and in both of them the nerves were involved in the resulting cicatrices. In all seven the same symptoms were noted.

After the neuralgia had lasted for some time, usually months, a very violent attack occurred, accompanied by marked conjunctival injection and diminished tension, followed by a sharp iritis, during which the tension rapidly decreased, the pupil remained contracted in spite of atropine, though not always from adhesions, and the neuralgia ceased. During the height of the inflammation the tension remained diminished, but when the inflammation began to yield, the tension began to increase and the pupil to dilate. With each fresh relapse, the same symptoms followed in usually the same order, and the choroid generally soon became involved. In only one case was there ever any conjunctival herpes, and in this case the vesicles always appeared at the inner angle, near the caruncle. The prognosis is almost always bad, for the neuralgic habit is almost permanent, and with each attack of neuralgia, the eye is almost sure to sympathize after the first attack of iritis. Of course when the choroid is involved, the aspect of the case becomes a grave one.

Case I.—*Long-continued Neuralgia of Frontal Nerve, followed by suppurative Irido-choroiditis and sympathetic Iritis in other eye.*

Patrick D., æt. 35, laborer; subject to frontal neuralgia of right side for nine years. At first, attacks slight in intensity and duration, and at moderately long intervals of three or four weeks; but gradually became more frequent, and increased in duration and severity, and for past year have occurred every day. Pain generally confined to frontal nerve and its branches, but occasionally invade cheek and orbit. Neuralgia always succeeded or accompanied by photophobia, lachrymation, and active injection of ocular conjunctiva, but V. never materially disturbed till six weeks ago. At this time neuralgia very intense, and accompanied by violent inflammation in eye. V. failed rapidly, and in less than 48 hours was entirely destroyed. Cornea ruptured, lens was extended, and eyeball rapidly degenerated from panophthalmitis. Since then, frontal neuralgia intermittent and less severe, but can always be excited by pressure on nerve. Six weeks after, violent inflammation, nothing left but small, very painful stump. Complete ptosis from paralysis of levator palpebræ, and plastic iritis in fellow eye with V. = $\frac{20}{200}$. Stump of R. E. immediately enucleated, and subsequently iridectomy upwards in L. E. with good result.

Case II.—*Irido-choroiditis following violent and continued Frontal Neuralgia of possibly traumatic origin.*

Ann H., æt. 55. Eight months before I saw patient, she was struck on forehead over R. E. by a large box falling upon her. Blow knocked her down, and in falling she received a severe wound over occiput from corner of chair. Was unconscious, and afterwards complained of diplopia and misty vision. When I saw her, there was a broad scar just above eye-

brow, 1½ inch long, across course of frontal nerve. Three weeks after accident, severe attack of frontal neuralgia, which lasted three days, accompanied by usual ocular symptoms. Attacks became more frequent, until now they occur every day. Three weeks ago, attack ushered in by violent inflammation of eye with marked failure of V. When I saw her, there was violent irido-choroiditis, discolored iris, immovable pupil, cloudy vitreous, diminished tension, V= fingers at two feet. Intense pain over whole side of face, and seemed to involve all branches of fifth. Atropine (gr. iv.), warm applications, and leeches, and one week later, iridectomy upwards. After five weeks of continued treatment, media cleared up, and neuralgia disappeared. V=$\frac{20}{100}$, and atrophic changes in choroid. After intermission of three weeks, neuralgia returned in frontal nerve; and with each exacerbation the eye became injected and painful, and one month after operation, second attack of violent irido-choroiditis which lasted five weeks, and neuralgia became almost constant. After ultimate subsidence of inflammation, V=$\frac{5}{200}$, and never improved. Neuralgic attacks grew less frequent and finally disappeared.

Case III.—*Irido-choroiditis, with diminished tension following contused and lacerated wound of forehead in region of frontal nerve, with obstinate neuralgia.*

Ellen C., æt. 72. Nine weeks before I saw her, patient had fallen down-stairs and struck forehead just above orbital margin, on edge of step. Profuse hemorrhage from wound, and unconsciousness for several hours. When she recovered, vision found uninjured, though she had never seen well, owing to high degree of myopia. Wound healed very slowly, and always very painful. Three weeks after accident pain became neuralgic, very severe, and involved all cutaneous nerves on right side of face, scalp and neck. On each return of neuralgia, sharp flashes of light before R. E., and V. became cloudy. When I saw her there was a scar an inch long just above right eyebrow, still red and painful—irido-choroiditis with posterior synechiæ, and cloudy vitreous. Tension markedly diminished, V.=movements of hand. In L. E., V=fingers at 20 feet with a myopia ¼, and extensive choroidal atrophy. Patient refused all operative interference. Three weeks later, returned with intense pain in R. E., V=0, and iritis in L. E. Iridectomy upwards in both eyes, and after long continued treatment by atropine, warm applications, repeated leeching and mercurials, inflammation subsided in both eyes, leaving V. in L. E. same as before; and neuralgia diminished in intensity and frequency, though it never was entirely cured.

Case IV.—*Optic Neuritis, followed by Irido-choroiditis, preceded by intense neuralgia of scalp and face of right side, of traumatic origin.*

Betty H., æt. 42. Three days before I saw her, she received violent blow on right side of face and head. No external wound, but next morning eyelids swollen and ecchymosed. No injury to conjunctiva, cornea, or iris, media clear, optic disk and retina normal, V.=$\frac{20}{30}$. Sharp intermittent pain in orbit and along forehead. Great pain on pressure over frontal nerve. No syphilitic, rheumatic, or gouty taint in patient. Neuralgia spread all over right side of face and scalp, and increased in severity. Three weeks after accident, vision began suddenly to fail very rapidly, and was reduced to counting fingers at six feet. Ophthalmoscope showed well-marked optic neuritis, with all the usual signs, but no hemorrhages. Leeches, atropine, mercurial inunction. Three days later, after violent neuralgia, irido-choroiditis developed, with marked diminution of tension. Same treatment persevered in, and after three weeks inflammation subsided, and vitreous began to clear up, and at end of sixth week the optic neuritis had subsided, leaving the disk somewhat paler than natural, but V.=$\frac{20}{40}$. Tenderness and neuralgic pain also diminished markedly, and eventually entirely disappeared from all branches of 5th except frontal, which was involved in scar. This case seems to show an intimate connection between trifacial and optic nerves. Neuritis of branches of 5th set up by injury seemed to be propagated from periphery towards centre, while neuritis of optic nerve seemed to have taken reverse course. Whether irritation of 5th travelled as far as nuclei of origin and was then reflected along fibres of optic nerve, may be regarded as somewhat doubtful. I am inclined to doubt existence of any serious inflammation in course of optic nerve downwards in this case, for this would probably not have yielded so readily to treatment, and would almost certainly have left disastrous results. The neuritis here probably limited to ocular end of nerve, and the medium of production may have been a disturbance in vaso-motor system presiding over circulation and nutrition of optic nerve, propagated to them from the 5th, either peripherically or from the centre, probably the former.

Case V.—*Irido-choroiditis following long continued Neuralgia of 1st and 2d branches of 5th nerve, with diminished tension, and ending in phthisis bulbi.*

Mrs. B. æt. 38. Seen in consultation in May, 1875. Perfectly healthy up to five years ago. First marriage at 20, but no children. Has had one child by second husband. Subject almost constantly to neuralgia of lumbar and dorsal regions for two years, but for last three years the pain has been confined to supraorbital and infraorbital nerves. These attacks occurred at irregular intervals and were of varying duration. Always confined to left side of face, and gradually increased in frequency and severity. Three months before I saw patient, after violent supraorbital neuralgia, a violent iritis set in, with marked diminution of vision. This resisted all treatment, and in time the fellow eye became involved sympathetically. On my last visit, I found in L. E., extensive irido-choroiditis, diminished tension, cloudy vitreous, limitation of visual field on temporal side V.=$\frac{5}{200}$. In R. E. iritis and posterior synechiæ. Iridectomy upwards immediately in L. E., leeches to both temples, atropine (gr. iv.) every half hour in both eyes, and mercurial inunction. Phosphorus, quinine, and nux vomica internally. Wound healed well, and in course of two weeks R. E. recovered entirely and vision improved somewhat in L. E. But no appreciable change in attacks of neuralgia. Three weeks after operation, a severe exacerbation of neuralgia, followed in less than an hour by severe irido-choroiditis in L. E., vision reduced to perception of light, and inflammation only yielded to treatment after two weeks. From this time the tension remained permanently diminished, though each attack of neuralgia was immediately followed by an increase of tension, which soon gave place to diminution below the previous degree. After a third relapse, R. E. again became affected with limitation of field and failing vision, and enucleation of L. E. advised, but was refused. Vision of L. E. permanently reduced to perceiving movements of hand. R. E. V.=$\frac{20}{100}$ with limitation on nasal side. The neuralgia remained just as severe, and each exacerbation was followed by recur-

rence of inflammation in L. E., and threatening symptoms in R. E.

CASE VI.—*Irido-choroiditis with marked diminution of tension, preceded for several months by neuralgia of frontal nerve, following fracture of the bones of the face.*

Bernard B., æt. 45, laborer. Two years before I saw the patient he had received a violent kick on right side of face from a horse. Blow had fractured orbital plate of superior maxillary, had driven in and comminuted malar bone, had fractured external angle of frontal bone and both nasal bones, causing deep depression between the eyes. Whole right orbit displaced downwards and outwards, so that inferior orbital margin stood ½ of an inch lower than opposite side. Sight of R. E. lost at time of accident, and globe had slowly atrophied without any pain, until when I saw him there was only a small stump left. He had no pain of any kind on right side after wounds had healed, but about a month after accident he began to suffer from severe pain on left side of nose and at inner angle of left eye, which was irregular in appearance and duration at first, but gradually became continuous, and subsequently involved infra-orbital nerve. These attacks became so bad that he was unable to do any work, and three weeks before I saw him the vision of left eye became seriously affected. I found severe neuralgia of naso-ciliary and infra-orbital branches of 5th on left side, partial ptosis of upper lid, injected conjunctiva, turbid aqueous, contracted pupil, irido-choroiditis and marked diminution of tension. Stump of R. E. immediately removed, and atropine, leeches to temple, phosphorus and quinine. On 4th day some slight improvement, pupil moderately though irregularly dilated, vitreous turbid, tension still diminished: V.= movements of hand. Slow but steady improvement in all symptoms till 9th day, when violent recurrence of neuralgia began, followed by relapse of irido-choroiditis, marked diminution of tension, no perception of light, and increased severity of pain. Iridectomy immediately done upwards and in course of an hour, ciliary pain ceased, though infra-orbital neuralgia still continued. Inflammatory symptoms slowly subsided, and some vision returned. Aqueous and vitreous cleared up, and two weeks after the operation choroid could be seen filled with exudation, floating bodies in vitreous, and = $V\frac{1}{20}$. Tension remained diminished for some weeks after operation, but finally reached normal standard. Circumorbital neuralgia diminished in severity and frequency, but was not entirely removed. No syphilitic or rheumatic taint in the case. May it not be probable that, as a consequence of fracture of nasal bones, the line of fracture may have extended into superior maxillary bone of left side, and injured terminal fibres of nasal nerve, or even the infraorbital nerve; or that, in process of healing, these nerves may have been compressed, thus giving rise to their inflammation and the consequent neuralgia?

CASE VII.—*Long-continued facial neuralgia, followed by iritis with deposit on membrane of Descemet, and subsequently choroiditis with exudation, with frequent relapses.*

Mrs. M., æt. 50. I first saw patient in June, 1875. She had been neuralgic from early childhood, and for many years had led a somewhat confined, sedentary life. The neuralgia was for many years general, occurring all over the body, but of late years they have been limited to the head and face, and more particularly to the right side. Six years ago had a violent attack of plastic iritis in R. E. Vision was seriously impaired, and inflammatory process lasted eight weeks. During this period the patient was entirely free from neuralgia, but as inflammation subsided, the neuralgia began to return, and was soon back in full force. The eye remained weak and irritable for a number of weeks, and she suffered from repeated attacks of conjunctival herpes. These were somewhat irregular, usually coming about once a month and lasting three or four days. Always ushered in by attack of frontal or infra-orbital neuralgia, and strangely enough confined to inner angle of eye, near semilunar fold and caruncle. During their presence the neuralgia ceased, to reappear on the subsidence of the vesicles. These attacks of herpes occurred with varying regularity up to March, 1875, when she had a more severe and prolonged attack, which left the eye weak and irritable, and early in April an attack of iritis supervened in one eye, with punctate precipitate on membrane of Descemet. At this time neuralgia very severe. Between this attack and June 17th, when I first saw her, she had four relapses of iritis. At my first visit there were numerous punctate deposits on posterior surface of cornea, iris discolored and adherent to capsule below, cloudy vitreous, tension diminished, and neuralgia violent. From this time up to Oct. 10th, she had five more relapses, each one severer than the preceding, and vision became seriously and permanently impaired, as the choroid was deeply involved. On Oct. 17th, a broad iridectomy was done upwards, after which there was very severe pain. But wound healed well, the inflammation subsided, tension increased, the neuralgia diminished markedly, and vision improved decidedly. Patient's condition steadily improved, and there was no further relapse till latter part of February. Since this period, she has had three relapses, and vision has sunk to counting fingers at a few feet. The facial neuralgia, however, is decidedly better, the attacks being much less frequent and less severe.

As regards the operation of iridectomy in these cases, a few words may not be amiss. Since the performance of this operation for making an artificial pupil, and more recently as a remedy for glaucoma, has made it widely known, it has become of such general practice in all sorts of cases, as to bring down upon itself from ophthalmologists during the past few years an amount of odium which is, I think, undeserved. The reaction has been too violent, and the pendulum of surgical opinion has swung so far in the opposite direction as to excite apprehensions that it will not swing back. There is no doubt that the operation has been performed in many cases, not only where it was not indicated, but also in many where it was strongly contra-indicated, as in cases of violent inflammatory action. Its ultimate disturbing influence upon vision has not been sufficiently considered by its too ardent advocates, and like many another medical or surgical remedy, it has been regarded as a sort of universal panacea for most of the deeper lesions of the eye. But recognizing this fact, it will not by any means do to reject it, as too many have done, and consign it to the limbo of surgical oblivion.

In the subject under consideration, in iritis and choroiditis, we may still safely trust ourselves to the dictum of our great master, von Graefe, who writes as follows:

"It is not iritis itself, the single acute attack, which in the majority of cases threatens the vision or even the loss of the eye, but the frequent relapses, which always cause new exudations into the pupil, and frequently its complete closure. In many of these cases the real origin of the evil lies in the eye itself, in the posterior synechiæ. The periodic ciliary neurosis, so

common in these cases, often depends solely on the presence of these posterior synechiæ. The closure of the pupil forms the point of origin of further complications, particularly chronic choroiditis and phthisis bulbi. Where atropine fails to break up the synechiæ, and relapses continue to occur, there is but one resource left us, the performance of an iridectomy, which should be so done as to break or tear away the broadest synechiæ, and thus do away with the exciting cause."

From my own experience, while admitting that even an iridectomy does not always succeed in preventing the relapses in these cases complicated by a diseased trigeminus, yet I certainly would not postpone the operation till the eye had become seriously damaged by the relapses, but would do it as soon as it was evident that the ordinary means of treatment had failed.

DAMIANA.

By ALEXANDER MURRAY, M.D.,

NEW YORK.

As a new remedy, Damiana is now doubtless engaging the general attention of the profession. My friend Dr. J. J. Caldwell, of Baltimore (formerly of New York), has published an interesting article on its use, etc.* After reading his paper, I was desirous of testing its therapeutic value in nervous diseases, but more especially as an aphrodisiac.

The desideratum most needed in certain nervous affections, is a reliable substitute for phosphorus. For this agent when taken internally, even in very small doses frequently repeated, is not altogether free from danger, no matter with what menstruum it may be combined—as oil, wax, lard, alcohol, ether, sugar of milk. After a few doses are taken, it invariably produces a sensation of burning at the pit of the stomach, and also disagreeable eructations of gas, which have a phosphoric taste and odor, or as some patients have expressed it, as if "a box of matches had been swallowed."

With this inducement, therefore, in addition to that general desire to advance the healing art, more particularly in a direction where of all others it seemed most to require it, I proceeded to make trial of damiana in a number of cases which happened to offer; encouraged with the hope that, since we already had obtained, in bromide of potassium, a means of repressing the sexual impulse, we might find in the other article a means of exalting it, and thus have it in our power to satisfy both classes of patients, as well as those laboring with priapism on the one hand, and those with prostration on the other.

Case I. was that of a lady, aged 24, of a highly hysterical constitution, who had married about three years. Her menstruation was always regular, but scanty, of a pale color, and unattended with pain. She informed her husband that about a year previous to her marriage she had lost all sexual desire, owing, as she alleged, to a paroxysm of hysterical convulsions. She had strong hopes that the influence of matrimony would restore the lost appetite.

Her husband manifested great anxiety for her recovery, and especially as he was desirous of having family. A careful examination of the organs of generation showed that they were normal and healthy.

I was determined in this case to give damiana a fair trial, in order to test its real or therapeutical value. I began treatment by giving the fluid extract in two-drachm doses three times a day for one month, and then an ounce and a half in divided doses for the succeeding two months. During the third month she imagined she had recovered somewhat her sexual appetite. The use of the drug, however, produced a decided change in her physical appearance, making her robust and healthy, whereas before she had been thin and pale. She was naturally of a constipated habit, and consequently required the occasional use of purgatives. After the extract of damiana had been taken for a few days, it produced large soft alvine evacuations, and subsequently the menstrual flow was both normal in quantity and color. The latter effect, I believe, was due altogether to the improved condition of her health, rather than to any emmenagogue properties in the drug.

Case II.—Mr. K——, aged 42 years, a native of Germany, merchant, had always enjoyed good health; never had syphilis or any other disease, that he is aware of; and had not at any time indulged in the excessive use of stimulants or tobacco. About six months after his second marriage, he experienced marked sexual weakness. He attributed the cause of his weakened powers to having been allowed, through neglect of the attendants, while taking a vapor or Russian bath, to remain too long on his back on a heated marble slab. He also stated that the excessive inhalation of steam during the sweating process, produced palpitation of the heart, difficult breathing, and a sense of immediate suffocation. Soon after he left the bath-rooms he had a slight attack of vertigo, and experienced great difficulty in walking to his residence, which was about four blocks off.

Two months before he came under my observation, he had been treated for impotence by a "charlatan," who, under the promise of a speedy cure, fleeced him out of a large sum of money. Mental despondency arising from the cares of business, with his anxiety concerning his young wife, drove him to the verge of insanity.

After a careful review of his case, I was doubtful of obtaining satisfactory results by any mode of treatment whatever, and accordingly held out no promise of success. However, I applied galvanism (interrupted current) to the spine every second or third day, for four weeks, and gave the fluid extract of damiana in half-ounce doses, thrice daily for nearly nine weeks. About three months from the commencement of treatment he stated, to use his own words, that "he was a man again," and expressed himself very desirous of continuing the damiana.

Case III.—John B——, 28 years, a robust, healthy-looking person; a house carpenter; never had syphilis; married about nine months. He attributed the cause of impotency to the taunts of his wife, whose propensities were stronger than his own. The consequence of this was the most unbridled excess in sexual indulgence during the first six months of matrimony. He was very despondent at times, and threatened to commit suicide in the despair of a cure. Separation from his wife for a time, cheerful society, and the administration of damiana, resulted in about two months in restoring the sexual ability.

Case IV.—Mr. Charles H——, æt. 34; clerk; short, stout, and vigorous; while walking, fell and hurt his spine. He complained of severe pain in the lower part of the back (sacro-coccygeal region) and the left thigh. Micturition was for several days both painful and difficult. The shock to the spine produced impotency. He had neither desire for, nor power of coi-

* Virginia Medical Monthly, May, 1875.

tion. His wife, a good sensible woman, consoled him, and encouraged the hope that time and medical treatment would restore the lost functions.

About three weeks from the date of injury, faradization was employed daily to the spine for eight applications. As he was unable to attend to business, he resolved to go into the country for a short time until recruited. I supplied him with the fluid extract of damiana sufficient for six weeks, with directions to take four drachms three times a day. He called to see me after an absence of two months, and reported that there was a marked improvement in his sexual ability. Subsequently, after two weeks by too frequent marital intercourse, a diminution of virile power was apparent, and consequently he fell back on damiana for a few weeks longer. Moderate indulgence was now strictly enjoined.

Case V.—Mr. R——, æt. 46; a lawyer; had syphilis when a young man. He had an attack of apoplexy about four years ago, and for several days was in a precarious condition, but he gradually recovered consciousness, leaving the left side completely paralyzed. By judicious treatment and repeated applications of faradism, he was able in six weeks to walk about, and in less than three months to follow his professional avocations. Although sufficiently recovered to attend to his business, still, he had been quite frequently despondent, as he experienced a marked loss of sexual ability. For this ailment he had consulted several physicians, followed their advice, and had used phosphorus, strychnia, ergot, and electricity, without any apparent effect in restoring his virile power.

For more than two years he had given up all treatment as useless. I advised him to give damiana a steady trial for at least two months, at the end of which time to let me know the result. There was a decided improvement in his condition. The power of erection, however, was not altogether satisfactory, and though at times it was sufficient to complete the sexual act, yet, it very often failed at the important moment. His recovery, although not complete, had exceeded his anticipations, and encouraged the hope that damiana would ultimately accomplish the desired result.

In a few cases of midwifery—inertia of the uterus—I have given four drachms of the fluid extract every 30 minutes, three succeeding times, without apparently augmenting uterine contraction.

I have noticed that when damiana had been taken for a week or two, it invariably produced (in about two-thirds of my patients) an eruption of acne on the head and body. It also induced large soft evacuations from the bowels, especially in those of a constipated habit. The drug did not act as a laxative, but more as an alterative—in fact, somewhat similar in its results to the extract of belladonna, when administered in chronic constipation.

I did not observe any marked effect on the heart, liver, stomach, or bladder. In a few instances I noticed the diminution of the phosphates, and almost the entire absence of the oxalate of lime, which usually appear in the urinary secretion in cases of nervous affections, and especially in cases of impotency.

The value of damiana in impotency is more apparent in stimulating venereal desire than in restoring the vigor or power of the virile member. In several cases, the drug failed to manifest any curative effect, while in others particularly in those arising from an attack of paralysis (hemiplegia), even of six or eight years' standing, it was more or less beneficial.

Damiana is by no means an agreeable remedy to take. The bitter, slightly acrid taste, and the "sassy" flavor are disliked by many patients. It sometimes excites nausea or vomiting, especially when taken on an empty stomach, or when the dose is not largely diluted with some menstruum.

The fluid preparations of damiana, when mixed with water, act somewhat similar to the tincture of guaiac—that is, by forming an opaque mixture or emulsion, of a dirty greenish white color. A combination with a little liquor potassa or water of ammonia forms a tolerably clear solution when diluted with water. The tincture of the chloride of iron changes the fluid extract to a dark bluish-green color.

Generally I prescribe the fluid extract of damiana in combination with equal parts of glycerine and syrup of tolu, or with some fruit syrup. Several of my patients have taken the drug in claret, Rhine wine, or lager-beer, to disguise its taste, while many others prefer the cold fresh infusion. Frequently I have prescribed, as an adjunct, dilute phosphoric acid, from 10 to 15 drops with each dose of damiana. This addition renders it pleasant and easy to take.

The following is the formula of the infusion which I have employed:

Damiana, leaves and flowers	2 oz.
Liquorice root bruised	½ oz.
Boiling water	16 oz.

Macerate for eight hours in a covered vessel, and strain. Dose—2 to 4 ounces.

The preparations of damiana which I have prescribed were prepared by Nickles, 697 Broadway.

Progress of Medical Science.

On Official Dosage, with some Remarks on Homœopathic Tinctures.—Dr. Farquharson contributes an interesting paper on the above subjects to the May number of the *Practitioner*. In the first part of his paper he shows that the maximum doses of digitalis, belladonna, conium, tincture of iron, bromide of potassium, etc., etc., allowed by the British Pharmacopœia are all too small. In the case of tincture of aconite, on the other hand, both the minimum and maximum doses are too large, while the minimum doses of liquor morphiæ, strychnia, and tincture of nux vomica, are all placed too high. He cites several cases in which these mistakes in the official dosage led to serious annoyance to physicians by inducing pharmacists to refuse to put up prescriptions as they were written, and shows how such refusal may gravely imperil the interests and safety of the patients. He urges warmly that something should be done to carry out the suggestions of Anstie, who had, shortly before his death, devoted considerable attention to the subject of official dosage, and recommended the formation of a committee of competent men by the colleges or medical societies to investigate the question.

Dr. Farquharson, however, congratulates us on the fact that the errors in our Pharmacopœia are mostly on the side of caution, and contrasts it with the looseness which prevails in homœopathic pharmacy, in which the feeble dilutions of former years have been replaced by excessively strong tinctures. Dr. G. Johnson cited, in a paper recently read before the Clinical Society, five cases in which unpleasant and even dangerous symptoms followed the use of the concentrated homœopathic solution of camphor, in quantities ranging from eight 2-minim doses up to twenty 25-minims

and a teaspoonful. This solution is stronger than the spt. camphor. of the B. P. in the proportion of 7½ to 1, containing one ounce of camphor to one and a quarter ounce of spirit. Anxious to obtain a correct idea of the strength of some of the homœopathic remedies, Dr. Farquharson tried some experiments with a few of their mother tinctures and metallic solutions. He found by experiment that 15 drops of the mother tincture of aconite were sufficient to kill a rabbit. This tincture about equals in strength the British liniment of aconite. The mother tincture of belladonna is stronger than the tincture of the B. P., 10 ♏ causing on himself dryness of the throat and unpleasant dreams. The homœopathic solution of arsenicum, of which the dose for an adult is one to five drops, contains one grain of arsenious acid to 102 ♏ of water, while the corresponding solution of the British Pharmacopœia contains one grain to 120 ♏ of solvent. A solution labelled "Mercurius cor. Poison. Dose for an adult one to five drops," contained about one grain of the amido-bichloride of mercury to two fluid drachms of alcohol. This is about four times the strength of the solution of perchloride of mercury as ordered in the British Pharmacopœia.

Both these vegetable mother tinctures and the solutions, the latter of which were, it is true, labelled "Poison," were sold freely and without question over the counter of a homœopathic pharmacy. What becomes, then, of the boast of the homœopathists that no mercury or injurious metallic substance is ever prescribed by one of their practitioners? The above figures show how misplaced is the rash confidence of homœopathists in the weakness and innocuousness of their drugs. A mistake in the matter of aconite, for instance, would not be likely to occur to the same patient a second time. Indeed, in view of the careless way in which amateurs recommend and take homœopathic remedies, it does not seem at all improbable that a mother tincture might be mistaken for one of its dilutions. In conclusion Dr. Farquharson cheerfully admits, that although we are supposed to ruin the constitutions of our patients with enormous doses of deleterious substances, we must yield the palm of potency of dosage to those practitioners, the very essence of whose professional existence was formerly believed to depend on the magical effect of their infinitesimal dilutions.

Physiological Chemistry.—MM. Malassez and Picard have lately devoted considerable time to the study of the chemical composition of the spleen, and have discovered that it contains a much larger quantity of iron than the blood which it contains could supply. They pumped into the splenic artery a quantity of a solution of sea salt, until it issued from the vein perfectly colorless. The salt solution drives out the blood mechanically, but does not dissolve any extraneous hemoglobine that exists in the tissue of the spleen. After this process the spleen retained its red color, though it was certainly entirely empty of blood. A quantity of pure water, which dissolves hemoglobine, was then injected into the artery, and when it issued from the vein it had a deep red color. At the same time the organ began to lose its red color and gradually assumed a pale yellowish tinge, the water issuing from the vein losing its red color as the spleen became decolorized. Microscopical examination of this fluid showed no red globules, but the spectroscope and chemical analysis revealed the presence of hemoglobine. It is evident, then, that free hemoglobine exists in the spleen outside of the vascular system, or at least that the organ contains an organic substance that is transformed into hemoglobine by the action even of a vehicle as weak as simple water.

Another physiologist, M. Raoult, has been experimenting with the object of determining the effect of inspired carbonic acid on hematosis. He experimented on rabbits placed in an apparatus so arranged that the expired did not mingle with the inspired air, and which permitted analyses of both to be made, and allowed of changes in the composition of the latter to be made at will. The air inspired contained always a fixed quantity of oxygen, about 21 in the 100 parts, but a certain quantity of the nitrogen was replaced each time by a similar quantity of carbonic acid. The maximum dose of the last used was 24 parts in 100. The number of inspirations per minute diminished in an inverse proportion to the amount of carbonic acid inspired, but they at the same time increased in depth, so that the volume of air inspired in a minute was nearly doubled. At the same time the amount of carbonic acid produced by the pulmonary combustion diminished sensibly; the analyses showed that when 100 cubic inches of inspired air contained 20.8 cub. in. of oxygen, and no carbonic acid at all, 2.8 cub. in. of oxygen were consumed and 2.3 cub. in. of carbonic acid produced; when, however, the inspired air contained 20.8 cub. in. of oxygen, and 12.1 cub. in. of carbonic acid, the oxygen consumed was only 1.1 cub. in., and the carbonic acid produced, 0.9 cub. in. In order to overcome this diminution in consumption and production, the amount of air inspired, as is mentioned above, was nearly doubled, but even this was unable to supply the deficiency, for in the same space of time less oxygen was consumed and less carbonic acid produced.—*La France Médicale*, May 31st, 1876.

Biliary Colic.—In a paper read before the Medical Society of the College of Physicians of Ireland, Dr. Hayden gave the histories of seven cases of biliary colic, with two deaths, one from pyæmia and the other with rigors followed by coma. The special symptoms of the affection are said to be thrilling at the epigastrium, and spasmodic pain extending to the right scapula, accompanied by sudden inflation of the stomach and vomiting, and ceasing abruptly after some hours; the liver is somewhat enlarged and tender on pressure. Jaundice generally appears within twenty-four hours after an attack, the urine being colored with bile, while the fæces exhibit a want of it. After the earlier paroxysms, however, jaundice is not unfrequently absent. The smooth, round, yielding tumor, mentioned by authors as formed by the distended gall-bladder, is very rarely met with. The treatment during a paroxysm consists in hypodermic injections of morphine, the hot bath, and a turpentine enema. Inhalations of chloroform are less efficacious than morphine. In the intervals a few grains of blue pill, with extract of belladonna and dried soda, should be given thrice daily, and occasionally a rhubarb or seidlitz draught. The general treatment with a view to a cure should have reference chiefly to diet and exercise. Food should be taken in moderate quantity and frequently; the bowels should be moved daily, and above all active exercise out of doors should be systematically pursued. Fats, sugar, hot bread, malt drinks, highly spiced dishes, and rich soups should be avoided. Claret, soda, and seltzer water should be freely used. Green vegetables, especially spinach and broccoli, fresh ripe fruit, and plain puddings may be used. The natural alkaline waters should be used both internally and by the bath for one or two seasons; those of Vichy, Carlsbad, and Marienbad are the best. —*Dublin Journal of Medical Science*, April, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, August 19, 1876.

THE CROTON WATER SUPPLY.

THE discussion in the newspapers concerning the recent smell and taste of the Croton water supplied to the city has directed a considerable amount of attention to the subject, and has given the public some insight into the methods by which the water supply is managed.

So far, every one must be satisfied that the aqueduct department has been doing everything in its power to remedy the evils, and from the start has been alive to the necessities for prompt action. The cause of the trouble may be referred to two circumstances—the accidental admixture of vegetable refuse, and the extra accumulation of green scum, or, as it may be technically called, nostoc. Both of these conditions have been the result of a prolonged drought, for which, under existing arrangements, the authorities of course are not to blame.

The character of the water-shed of the Croton guarantees water of the best quality. Nowhere in the world are the natural conditions so well fulfilled for absolute purity. Extending over an area of eight hundred and thirty-nine miles, this water-shed is capable of supplying a city with four times the population of New York, and is practically free from all the ordinary sources of pollution in the shape of sewage, or from the contaminating influence of factories on the banks of the tributary streams.

The system of water supply is admirable, as far as it goes, and is calculated to meet all objections on ordinary occasions, but that extra emergencies are apt to arise which, under the existing engineering facilities, the authorities are not able to meet, is now quite apparent.

The question which naturally presents itself at this juncture refers to the best means which can be adopted to counterbalance, wholly or in part, the effects of any accident of a prolonged drought in future. It is hardly possible to prevent the formation of scum on drinking-water when kept for a long time in a reservoir, and although it is comforting to know that algæ are not poisonous, their presence is not calculated to add to palatability.

Again, the accidental admixture of extraneous vegetable material washed into the streams by light rains, which material, in consequence of the low level of the reservoirs, cannot be washed over the dams, will hardly explain away the anxiety for more serious contamination in future when the causes producing it may accidentally be intensified. It is not, however, sufficient to explain that unpalatable water is not unhealthy, as naturally the demand must be for pure water at all times and under all circumstances. There is in fact nothing in which the public take a greater interest, and nothing concerning which a greater effort is likely to be made in the direction of radical measures. Fortunately, the remedies for the evils complained of are not beyond our reach. The Chief Engineer of the Croton Aqueduct Department has explained in a very satisfactory manner the cause of the trouble, and has suggested a feasible plan for so increasing the engineering resources as to render similar accidents impossible.

The obvious means of counteracting the effects of a drought is to increase our reservoir capacity, not only to have enough water in store, but enough to spare for washing over our dams and getting rid of vegetable debris. The chief engineer believes that such is hardly possible at present, and suggests the construction of an extra dam higher up the Croton river, which, in his opinion, will guarantee the storing of sufficient water to meet the greatest emergency of the most protracted drought, affording the means of overflowing the dams and of "blowing out" the "dead ends" of the pipes whenever the purposes of cleansing require it.

Another suggestion which he makes in reference to the construction of an extra main to the city is worthy of serious thought. No more opportune occasion than the present could be seized by him for urging the adoption of a measure, the feasibility of which can hardly be questioned.

Of course all this will entail expense upon the city, but it is the only condition upon which the possible evils of bad drinking-water can be prevented. In view, however, of the great interests at stake, there is good reason to hope that any reasonable means which may be adopted to obviate any of the probable accidents of the future, will meet with no serious opposition. The time will come when the necessities for these improvements will be more apparent than they are even at present, but the more the subject is agitated the sooner will the public be prepared to take action in the matter.

So far, the Aqueduct Department has proved itself worthy the confidence of the people: indeed, it must be apparent to all, despite the sensational charges of

negligence in some of the newspapers, that it has done all that could have been expected of it, not only in efforts at preventing contamination, but in mitigating its effects when such prevention has been beyond the means at its control.

Reviews and Notices of Books.

ROYLE'S MANUAL OF MATERIA MEDICA AND THERAPEUTICS. Edited by JOHN HARLEY, M.D., London, F.R.C.P., F.L.S. Sixth Edition. Philadelphia: Lindsay & Blakiston. 1876. 12mo, pp. 823.

THIS is an elegant volume of over eight hundred pages, and as a manual for students, either medical or pharmaceutical, seems all that could be desired. Every page shows the painstaking labor bestowed upon it by its distinguished editor, Dr. Harley, and the many additions and alterations found in the work will but increase its usefulness, and ought to make it a standard reference for all time. As deserving of particular attention, the well-written articles on Conium, Digitalis, Belladonna, Quinine, etc., etc., are commended to the reader, and they alone will fully compensate for the small outlay required to possess this compact and masterly edition to our Materia Medica.

TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION. Vol. XXVI. 1875, p. 525.

THIS volume of "Transactions" has just made its appearance upon our table, nearly one year after the meeting of which it is a report. On the principle "better late than never," we congratulate the members on the early date of its publication. As there appears to be no reasonable excuse for the delay, we are called to commend the arduous labors of the Committee on Publication. As a whole, the volume is a good one, the majority of the papers being of much value, and evincing a disposition on the part of contributors to minister to the practical wants of the profession at large. The addresses are, without exception, admirable, and prove the wisdom of the change in the plan of the organization which provides for their annual delivery.

The reports of the sections are full, accurate and interesting, and form one of the principal attractions of the volume. As usual, the work is well printed, and sensibly free from typographical errors.

HINTS IN THE OBSTETRIC PROCEDURE. By WM. B. ATKINSON, M.D., Physician to the Department of Obstetrics and Diseases of Women, Girard Hospital, Philadelphia. T. K. Collins, Publisher, 705 Payne Street.

THIS small manual of about seventy-five pages, although containing nothing new, recalls to mind many valuable and generally recognized rules of practice in this branch of medicine. Frequent errors in the grammatical construction of sentences detract not a little from the merits of the book. In many places the style is awkward, and the views of the author obscurely expressed.

That "ergot becomes of value when, by the feebleness of the pains, the delivery is retarded, while the presentation is natural and the os is dilated or readily dilatable, the head still remaining high up," is a statement many will doubt, and in the practical application of which all need to exercise the greatest care.

A TREATISE ON THE DISEASES OF THE NERVOUS SYSTEM. By WILLIAM A. HAMMOND, M.D. Sixth edition. Re-written, enlarged, and improved. New York: D. Appleton & Co.

THE present is the sixth edition of this work, which, we are informed by the author, has been "re-written, improved, and enlarged." As a whole, the volume is a remarkable compilation of the literature of nervous diseases, giving a very fair idea of the field occupied by this specialty. Although it contains much, it nevertheless lacks much. The pretensions to which it lays claim of being an authority on the subjects of which it treats, makes the omissions of fact and inaccuracies of statement which are to be found throughout the volume less likely to be overlooked than would otherwise be the case. We shall refer to a few of those which have impressed themselves upon us while reading the volume. Although, for instance, the pages which treat of cerebral hemorrhage are very full, we find no mention of the fact of some importance, that when contracture sets in in the very beginning of the disease the case proves almost always fatal, and that if during the first two or three days both upper and lower extremities are paralyzed, the spinal muscles are also found paralyzed to some degree, and that there is then also slight impairment of sensation. The eyes, when conjugated deviation exists, as a rule are turned toward the seat of the lesion; hence the saying of Vulpian, who has with Prevost most ably studied that subject, "*Les yeux regardent la lesion.*" We also believe that it is very important not to make use of electricity during the first days after the onset. Duchènne, amongst others, has given ample reasons for not using it.

The history and pathology of aphasia are very complete; the cases which belong to the author are identical with those reported every day in the journals. We regret that he finds no evidence in support of the opinion that aphasia may sometimes have a reflex origin. Brown-Séquard, Ogle, Onimus, and others have given abundant proofs of the existence of reflex aphasia. Onimus especially has published, three years ago, an admirable paper on the subject.

Dr. Hammond does not think that tumors can always be diagnosticated (except syphilitic), but he omits the well-known rule that convulsions, headache, and vomiting, when associated, prove beyond doubt the presence of a tumor. Moreover, tumors when located in the immediate neighborhood of the petrous portion of the parietal bone can in almost all cases be detected, as has been shown by divers authors, and especially by Brown-Séquard.

There is next an extensive chapter on the diseases of the spinal cord, which is too much divided and subdivided, and too hypothetical. In practice it is next to impossible to recognize functional disorders of every one of the numerous columns of the cord. However, the researches of the French, English, and German physicians are very elaborately exposed. The pathology of progressive facial paralysis is very fully developed, but we do not see why Dr. Hammond ascribes the disease to lesions of the nuclei of the facial nerve, and sometimes of the trigeminus. There is certainly no analogy between the symptoms which follow recognized alterations of those nuclei and the malady under consideration.

Dr. Hammond endeavors next to explain the pathology of tetanus on experimental facts. Those facts are few, and do not prove much. The experiments of Bernard on strychnia, which are here quoted, certainly have another explanation than the one given by Ber-

nard, as shown by almost all those who have experimented with the drug.

A parallel, however, drawn between the pathological anatomy of tetanus and hydrophobia would perhaps tend to show how insecure it is to be positive about anything in nervous diseases. Hydrophobia is as yet a most obscure affection, and since the researches of Meynert and Clifford Allbutt there has been nothing original added to our knowledge. We are unwilling to suppose that additional observation in the same direction with Clifford Allbutt would tend to give any appearance of certainty to his hypothesis, because the anatomical changes noticed are common to all diseases where death has come on by asphyxia after paroxysms of long duration.

That hydrophobia is communicated by saliva is very improbable, if recent experiments of some distinguished French scientists are accurate. The affection, although mostly fatal, has been cured in some instances.

Dr. Hammond seems to us to have been very felicitous with his cases of locomotor ataxia, as he reports six or seven cures. We have always heard of temporary relief, but never of a cure. The treatment advised by Dr. Hammond, in his hands proves so much more efficient than with his European *confrères*, that only a difference in the lethality of the disease, due to climatic influence, can explain it.

There is also an inaccurracy in the statement of Dr. Hammond that epilepsy is due sometimes to anæmia of the brain, and sometimes to congestion. The theory of anæmia has been pretty generally accepted since the labors of Brown-Séquard, but that congestion also does give rise to epilepsy is not so generally admitted. Dr. Hammond states that nitrite of amyl puts off an attack of epilepsy, by causing dilatation of the vessels of the brain. Now it is a fact that that substance *causes* congestion of the brain, but it is a fact also that epileptic fits never follow its administration, which we ought to expect if the congestive theory were true. That the process of epilepsy is somewhat similar with that of sleep cannot be admitted, except as far as the onset is concerned, even if the theory of sleep advanced by Durham, and since advocated by Dr. Hammond, was not seriously opposed by a host of physiologists, and lately by Vulpian. We take the opportunity to point to the learned author the excellent work of Dr. Magnan on alcoholism, as bearing upon epilepsy and kindred diseases. In conclusion, we would refer in passing to a matter of treatment.

It is very necessary, we believe, that the actual cautery should be applied without previously anæsthetizing the parts with ether spray. As suggested by Dr. Hammond, there is no necessity to burn the teguments, but only to touch them slightly with the iron heated to whiteness. Such being the case, it becomes obvious that anæsthesia can but prevent the effect of the application. Moreover, we think that the instrument is very useful in *all* cases of contractures and inflammation of the nervous centres, chronic or acute.

AIDS TO ANATOMY. By GEORGE BROWN, M.R.C.S., L.S.A., late Demonstrator of Anatomy at Westminster Hospital Medical College, etc., etc. London, Dublin, Edinburgh, Glasgow.

THIS little manual is a reprint of anatomical memoranda published in *The Students' Journal and Hospital Gazette*. It is divided into XLV. sections, each of which contains an enumeration of the anatomical parts embraced by the triangle, space, region, nerve trunk, etc., under consideration. It is convenient for reference and study.

CYCLOPÆDIA OF THE PRACTICE OF MEDICINE. Edited by DR. H. VON ZIEMSSEN. VOL. V. *Diseases of the Respiratory Organs.* By Prof. Juergensen of Tübingen; Prof. Hertz of Amsterdam; Prof. Ruehle of Bonn, and Prof. Rindfleisch of Würtzburg. Albert H. Buck, M.D., Editor of American Edition. 8vo, pp. 712. New York: Wm. Wood & Co. 1875.

THE names of the contributors to this volume justified the expectation that it would prove to be one of the best of the series, an expectation which is abundantly met by the reality. The selection of Prof. Juergensen to furnish a treatise on pneumonia, is as appropriate as that of Liebermeister for typhoid fever; and the gifted young author has done himself additional credit by the able manner in which he handles his subject.

The first paper is on croupous pneumonia. After a brief outline of the history of the disease and due study of its etiology, the writer passes to its pathology and morbid anatomy. Under the latter head we find the following definition: "croupous pneumonia is, anatomically considered, an acute inflammation of the alveoli and bronchioles, in which a fibrinous exudation is poured out upon the free surface of the mucous membrane and there coagulates." The author, however, does not commit himself to an opinion as to the origin of the different constituents of the exudation, although giving, at considerable length, the views of other writers on this point.

As regards caseation of the exudation, which is so stoutly denied by Buhl, who avers that phthisis or cirrhosis never follows croupous pneumonia, Juergensen very appropriately calls attention to the fact that Buhl is not a practising physician, and that clinical experience proves beyond doubt that both these results may occur, an assertion in which he will be borne out by many observing practitioners. The analysis of individual symptoms, and the questions of physical examination, complications, terminations and diagnosis, are all admirably, and, at the same time, concisely set forth.

In entering upon the treatment of the disease, certain queries are propounded and are thus answered: "Croupous pneumonia is a constitutional disease, and is not dependent upon a local cause. The pulmonary inflammation is merely the chief symptom, and the morbid phenomena are not due to the local affection. The hypothesis of a morbific cause is indispensable. Croupous pneumonia belongs to the group of infectious diseases." (Of course our readers will not understand infectious to mean contagious.)

We cannot enter upon the author's defence of these positions. Merely to state them is enough to attract attention and arouse interest. Following certain principles which are laid down, rather than any routine practice, it appears that we have to do almost nothing for about eighty per cent. of the cases of croupous pneumonia, and to employ the most active treatment in the remaining twenty. Danger threatens the heart principally, death resulting from insufficiency of the heart. The arguments to sustain this proposition are conclusive, but cannot, of course, be given within the narrow limits of such a notice as this. The two objective points of treatment, therefore, are first, the prevention of cardiac exhaustion; and second, its control, if already existing. The most important means of prevention is to combat the fever, which may be best accomplished by means of cold baths and quinine.

When cardiac insufficiency has intervened, stimulation by means of wine, liquor, camphor, musk, etc., is advocated. All the author's views are abundantly

fortified by anatomical and clinical facts, and what seems to us candid and logical reasoning.

The subject of catarrhal pneumonia is much more briefly disposed of. We are told at the start, that this form is always secondary, never originating primarily in the alveoli, and being usually preceded by an inflammation of the bronchial mucous membrane. In the etiology of the disease, those conditions and diseases which predispose to or induce bronchial catarrh naturally play a prominent part. The pathology and anatomical changes are briefly given. In analyzing the symptoms, it is first of all premised that catarrhal pneumonia has no regular type of fever. It is shown, also, that collapse of the lung plays a very prominent rôle in the early history of the disease.

The author admits that "the physical diagnosis of an acute and not very extensive catarrhal pneumonia belongs among the most difficult tasks in this department of our science." Throughout the paper it is insisted that bronchitis is the essential pre-requisite of this affection.

The section on Diagnosis is quite full and satisfactory.

As in croupous pneumonia, cardiac insufficiency was announced as the main cause of death; so, in the catarrhal form, *respiratory* insufficiency is assigned the first rank among the fatal agencies. In the matter of prophylaxis we must guard, first against catarrh; secondly, against pneumonia when catarrh exists. After catarrhal pneumonia is developed, the main point to aim at is the prevention of pulmonary collapse. In addition to some other means detailed, special stress is laid on the use of baths of a moderate temperature followed by cold affusions, the effect of the latter being to excite powerful and deep inspiratory movements, and thus distend every portion of the lungs. After recovery from pneumonia a *residence* in the country is recommended, as well as means for the most complete development of the respiratory muscles.

Hypostatic processes in the lungs and pneumonia from embolism are disposed of quite briefly, but with the thoroughness which is so characteristic of this writer.

Prof. Hertz, of Amsterdam, devotes twenty-five pages to Anæmia, Hyperæmia and Œdema of the Lungs, without telling us anything new. He is much better on the subject of Pulmonary Hemorrhages, the sections on etiology and pathology being especially clear and thorough. Prof. Hertz does not agree with F. von Niemeyer in the opinion that bronchial hemorrhage is often a cause of phthisis in previously healthy lungs. He would be more willing to believe that previous disease of the lungs had escaped detection. His differential diagnosis between hæmatemesis, bronchial hemorrhage, and the blood raised from a hemorrhagic infarction is plain and sufficiently definite. In the treatment of hæmoptysis, blood-letting may occasionally be applicable; in case of anæmia, iron internally; repose, narcotics, cold externally, inhalations of a solution of perchloride of iron, the watery extract of ergot hypodermically: all these are recommended. The use of emetics is not advised.

Twenty-two pages are devoted to the consideration of Pulmonary Atelectasis, Atrophy and Hypertrophy. Then follows a subject of far more general interest, viz.: Emphysema. The etiology and mode of development of this affection are discussed in an exceedingly able and interesting manner. Under the head of treatment, the method of placing patients in pneumatic cabinets and the inhalation of condensed or rarefied air by means of Waldenburg's apparatus, are referred to. For the benefit of our own readers the American Editor has very considerately added a description and plate of Waldenburg's apparatus in a foot-note.

Gangrene of the lung and New-growths in the lung are treated of in separate chapters. Then follows a very interesting chapter on New-growths in the Mediastinum, and Prof. Hertz's contribution closes with a few pages on Parasites of the lungs.

Prof. Ruehle, of Bonn, contributes a valuable article on Pulmonary Consumption, and another on Acute Miliary Tuberculosis; while Prof. Rindfleisch, of Würtzburg, closes the volume with a paper on Chronic and Acute Tuberculosis, including Pulmonary Phthisis. This seems at first sight a singular arrangement, but appears more natural when we find Ruehle treating particularly of the clinical aspect of consumption, while Rindfleisch confines himself exclusively to the pathology and morbid anatomy of the subject.

In his introductory remarks, Prof. Ruehle, alluding to the recent tendency almost to deny the existence of such a thing as tubercle, thinks this question has been left too exclusively in the hands of the pathological anatomists, and that practical pathologists and men of large clinical experience should be heard from.

An interesting point is brought up and discussed by both Ruehle and Rindfleisch, viz.: Why the apices of the lungs are the first seat of phthisis. The causes are purely mechanical, depending on obstacles to the free expansion of these parts and of the circulation of blood through them. Ruehle considers that croupous pneumonia very rarely leads directly to consumption, but is more likely to, when it attacks the upper lobes. Referring to the fact that catarrhal pneumonia is regarded as a frequent forerunner of pulmonary consumption, he says this may perhaps appear justified from an anatomical standpoint, but cannot be maintained from a clinical point of view. Like Hertz, he opposes Niemeyer's idea that bronchial hemorrhage is a frequent cause of phthisis.

In the analysis of individual symptoms he lays a good deal of stress on smallness of the chest, atrophy of the inspiratory muscles, small antero-posterior measurement of the thorax, and defective or unequal excursions of the upper ribs.

Under the head of diagnosis he points out the fact that acute miliary tuberculosis is a special affection which cannot be classed with pulmonary consumption; and he denies the existence of chronic miliary tuberculosis. He considers that, so far as we know at present, the different varieties of phthisis depend upon three forms of pulmonary lesions, viz.: first, the simple chronic pneumonia of the apex; second, broncho-pneumonia, in which the first change is the formation of clusters of nodular foci, which excite inflammation about them, etc., etc.; and third, morbid processes which begin in the bronchi, there producing inflammatory infiltration, caseation, etc. The sections on diagnosis, course and terminations, and treatment, are short and good, offering nothing that is specially new.

Acute miliary tuberculosis is assigned a separate chapter because the author believes it to be distinct from phthisis. We know of but one cause for the formation of miliary tubercle, *i. e.* absorption of caseous matter. This may arise from caseous lymphatic or bronchial glands; hence, after measles, etc.; also from caries of bone and other tissues. Pulmonary consumption is therefore only one of its exciting causes, though no doubt the most frequent one. On the morbid anatomy of this affection he quotes Rokitansky's words, as they appeared in the first edition of his Handbook, in 1842.

We have not the time left to give any such notice as it deserves to the closing chapter on chronic and acute tuberculosis, by Prof. Rindfleisch. It is a masterly effort, reconciling a good deal that has seemed to be antagonistic in the different views on this subject. The author recedes from much that he formerly held true, with regard to the origin of phthisis in pneumonia and bronchitis. A few years ago we were almost all carried away by the confidence and enthusiasm with which Niemeyer advanced his doctrines, based, as they seemed to be, on the anatomical investigations of Virchow and others. But many of us have gradually receded from this ground, as we have found that it failed to agree with the facts of our daily experience. We shall, therefore, be the more ready to accept the prominence again given to tubercle in the article before us, the rather as it is also effectively supported by anatomical demonstrations. We earnestly commend this paper of Rindfleisch to the careful study of all thinking men in the profession.

As before stated, Vol. V. of the Cyclopædia is one of the best, if not the best of the series.

MICRO-PHOTOGRAPHS IN HISTOLOGY. By CARL SEILER, M.D. Nos. 1 and 2. Philadelphia: J. H. Coates & Co.

THE title of this work is a misnomer. It should be *Photo-micrographs*, etc. A *micro-photograph* is a minute photo, such as are seen in watch-charms, knife-handles, etc., while a photo-micrograph is the photographic delineation of a microscopic object. The design of the present work is to illustrate subjects in normal and pathological histology by means of photographs of objects previously enlarged by the microscope. The photographic negative thus obtained is used as a basis for the photo-mechanical process by which the illustrations are produced. The idea of delineating microscopical appearances by means of photography is a good one, as it substitutes truthful representations for the fanciful distortions with which the draughtsman usually furnishes us. No one who has studied the superb photo-micrographs emanating from the Army Medical Museum can doubt their superiority over woodcuts and lithographs as a means of conveying *accurate* information concerning the appearances observed. In work of this kind, however, there are certain essentials which must be considered if success is to be obtained. In the first place, the subjects must be judiciously selected; second, photographs must be well made; third, the mechanical process by which they are reproduced should be the best attainable. By these criteria we must judge the present work.

Plate I., representing a *section of skin*, is good. Pl. II., *Epithelioma*, is badly selected, insomuch as in it the special peculiarities of epithelioma (cell-stratifications) are not represented. Pl. III., *Pavement epithelium*, is excellent. Pl. IV., *Endothelium*, was not in focus. Pl. V., *Elastic connective tissue*, is wretched. Pl. VI., *Scirrhus*, not well selected. Pl. VII., *Non-elastic tissue*, and Pl. VIII., *Connective-tissue corpuscles*, are superb.

The mechanical process employed is not a good one. The high lights are all studded with minute points which gives a granular aspect where there should be none. Some better process should be employed in future issues.

On the whole, Dr. Seiler's work is good, and should be encouraged, and if avoidable defects are remedied, he will doubtless succeed in giving to the profession a work of immense value. At present America stands at the head in the matter of photo-micrography, the work of Col. Woodward, of Washington, and of Prof. Arnold, of this city, being vastly superior to anything of the sort as yet produced in Europe.

Reports of Societies.

AMERICAN MEDICAL ASSOCIATION.

SECTION OF STATE MEDICINE AND PUBLIC HYGIENE.

CONTAMINATION OF DRINKING-WATER AND MILK.

THIS Section met on Tuesday afternoon, June 6th, Chairman, Dr. R. C. KEDZIE, of Michigan; Secretary, Dr. EZRA M. HUNT, of New Jersey. The chairman read a report, and proposed to the Association the consideration of the question, whether a subject should be annually assigned to the Section, and if so, that the Section should choose the subject each year. Among other matters, the importance of State Boards was argued, and their value illustrated by the benefits of a stringent inspection law as to illuminating oils in his own State, etc. He then offered a report on the waters of Michigan, public water-works, contamination of water by grave-yards and fæcal matter, the powers of the soil as a filter, milk as a vehicle of disease, as affected by the quality of the water, etc. He also read a paper on the same subject by Dr. Evarts of Minnesota.

DR. HENRY HARTSHORNE was particularly struck with the statements these papers contained in regard to milk and its agency in the production of disease. He did not think that disease could be transmitted through a mile of soil, as had been stated; there might be other and local causes to produce it. The soil would be more likely to act as a filter, and thus detain the germs of disease.

DR. BELL did not think with Dr. H. that the case cited destroyed the germ theory, for the germs, which are invisible, may not always be thoroughly filtered, even in passing through so great a distance. In regard to milk, the richest specimen of it may be diseased. A swill-fed cow will give milk richer in oil globules than one fed on wholesome food; yet medical practitioners know that it is not wholesome. He alluded to the effect of severe shock, over-heating, etc., on the milk. Sanitary supervision of milk is incomplete, unless it extends beyond the physical condition of the cow, and includes her keeping and food as well, and the place in which the milk is kept.

DR. KEDZIE also argued, that germs could not be perfectly separated by filtration; fine foreign particles could not be prevented from passing through.

DR. JONES, of Illinois, thought that boards of health were the only bodies that could grasp the broad subject of the milk supply. Even when a child is restricted to the milk of an apparently healthy cow, there may be something injurious to the child, as in a case cited, in which a child's nutrition suffered greatly, and was only restored by the death of the cow. The great mortality among children was largely due to the diseased condition of the milk.

On motion, the papers were referred for publication.

PREVENTION OF MALARIAL FEVERS.

DR. JOSEPH WILSON, U. S. Navy, then presented a paper on "Facts and Figures as to our Means of Preventing Malarial Fevers." He illustrated, from naval experience chiefly, his view that malaria never acts except at night. He inquired how far malaria could be carried, depending on its amount and other favorable or unfavorable conditions. The planting of pine-trees was good as a preventive.

Dr. Bell had not been able to say as emphatically as Dr. Wilson, that it was only at night that the malarial influence is potent enough to be dangerous, although he knew of no instance to constitute an exception to the theory. The same was true of yellow fever, so far as his observation extended. He alluded to the importance in the navy of keeping the proper distance from the shore, say a mile or two, there being no case on record where any person within two miles of the shore has ever contracted any disease peculiar to a locality, the water absorbing or interrupting the communication of the poison. In instances cited by him from naval experience, prophylactics were not used. At Vera Cruz he advised the use of whiskey, and hung up blankets to break the current of air. Bars were placed to come down over their hammocks, while sleeping on deck.

Dr. Hartshorne thought it safe to remain on shore in malarious districts, not only while the sun was far above the horizon, but even as late as sundown.

Dr. Wilson stated that at Charleston, where his early experience was derived, children would go through a severe storm to reach their homes by day, rather than through a malarious night air. The Chinese, even in the dangerous rice swamps of China, are almost proof against malaria, because they take good care to push off in their scows to a broad part of the channel before night. He considered half a mile from shore the extreme limit that malaria can be conveyed. In the navy they used prophylactics, quinine in large doses, and mosquito bars.

The paper was on motion referred to the Committee on Publication.

CLIMATOLOGY OF MINNESOTA.

Dr. Staples read a paper on the second day, on the Climatology of Minnesota as related to Pulmonary Diseases, which was similarly referred. A report on the Water Supply of Virginia, by Professor Cabell, was also referred.

SOCIAL ASPECTS OF THE ALCOHOL QUESTION.

Dr. May, of Pennsylvania, read a paper on the "Social Aspects of the Alcohol Question."

Dr. Ezra M. Hunt said the general view now taken was that alcohol's great offence was that it checks the tissue metamorphosis. He was not willing to dismiss the whole subject, of whether it is food or medicine, by saying that no one now claims that it is not food. Beale certainly takes this latter ground, and says it does check the tissue metamorphosis. He did not agree with the writer that food and stimulants are synonymous terms, or that if alcohol acted as a stimulant it always did good, and if as a narcotic it did harm, or that its stimulant effect could be told by the flushed face or its action on the kidney.

Dr. May said he drew a distinct line between large and small doses.

Dr. Hunt said the question was whether every dose was not a large one if it flushed the face.

Dr. Comings thought that alcohol was not an agent that private families could safely keep in their houses. He denied that it was a food any more than tobacco or opium. It is a narcotic, acting on the terminal nerves, paralyzing them, and suspending secretion, absorption, and other nutritive changes. A man under the influence of opium or tobacco can do without food longer than one who has not taken those substances, because normal changes are suspended, not because tobacco or opium are nourishing. In typhoid fever, alcohol was, in his view, only necessary when the blood is driven to the centre.

Dr. May said alcohol was used everywhere in hospitals in typhoid fever. As to the nutritive qualities of alcohol, the fact had been separately established by two German physiologists in their experiments on animals.

The paper was considered rather a popular exposition of the gentleman's theory, than as coming properly before the Section, belonging rather to a hygiene association.

Dr. Comings offered resolutions coinciding with the opinion expressed by the Association of Medical Superintendents of Insane Asylums: 1. That inebriates should not be sent to the same institution as the insane; 2. That inebriety being both a disease and a vice, special treatment in institutions adapted to the purpose is required for the inebriate, and it is the imperative duty of each commonwealth to establish and maintain public institutions for the treatment of inebriety.

Dr. Hubbard offered resolutions to the effect: 1. That a person, forming a habit of continual or frequent drinking of alcoholic beverages to intoxication, should be held to be of unsound mind; 2. That a suitable name for such intoxication is alcoholic insanity; 3. That it can be treated only in institutions especially established for that purpose; 4. That the two leading characteristics of such institutions should be restraint and profitable industry.

Dr. Comings said it required a little stretch of conscience to sign a certificate that a man was insane merely because of habits of alcoholic intoxication, but there is no other institution in which he can be treated except the insane asylum. From various official State and Society appointments, he had been led to inquire more fully in regard to this matter; he was anxious that this Association should add its voice. He referred to the predisposition of some persons to intoxication, even from moderate drinking.

Dr. Hubbard was anxious that the sentiment of the Association should be brought to bear on the Indiana Legislature to establish an institution for inebriates.

Dr. Hartshorne thought the first series of resolutions too sweeping, in stating that every one taking alcohol to excess must be insane.

Dr. Billings thought the phraseology as to "insanity being both a vice and a disease," tautological. The vice here is the disease.

Dr. Comings said the clerical profession treated inebriety solely as a vice, not recognizing it as a disease. The medical profession have not the means of treating it morally. Better to consider it both a vice and a disease, and let both professions attend to its proper treatment.

The resolutions of Dr. Comings were adopted. A paper by Dr. Dennison, on Colorado as a Climate for Consumptives, was referred to Dr. Toner, as a Committee of one, to report to the Section at its next session.

PUBLIC HEALTH COMMISSION.

Dr. Toner then read the report of the Committee on establishing a Public Health Commission for the United States, which, on motion of Dr. Billings, was made the special order for the next day.

On the third day, Dr. Billings stated that in his view the Association should not meddle with the matter at this time.

Dr. Harris, of New York, while agreeing with him, was anxious that the Committee's valuable report should be fully discussed. The three National Medical Societies are doing very much in this direction in their inquiries as to quarantine, prevalence of epidemics,

etc. The question is whether it would be desirable just at this time to add a National Health Council. He alluded to the difficulties in the States of bringing the popular intelligence and the Legislatures up to the standard, and to do the good work now in progress of accomplishment in improvement of water supplies, abatement of nuisances, etc., and contended that it was very important that this State work should continue to greater perfection before national systematized work of the same kind should be undertaken. Only seven States are as yet accomplishing anything of importance, without being hampered in some way or other. In Pennsylvania and New York it seems as if the time had hardly come yet when the Health Boards of the great cities would cheerfully unite with each other and with the physicians to secure a State Board.

Dr. Billings thought a bill for the establishment of a National Board, as reported by the Committee, would come more appropriately from the American Public Health Association, whose proceedings and discussions were intended for all. We must impress on our legislators the importance of sanitary measures, their good results, economic value, etc., but it is not the part of physicians and scientific men assembled in the National Medical Association to do so. The work of the latter was of a more special character, intended for a special class, physicians, and did not rightly include an attempt to lay out plans of legislation. The physician is especially interested in matters connected with the public health, because he sees more than any one else the bad results of want of proper sanitary measures. The information necessary for proper State legislation and statistics has to be furnished by the physician.

Dr. Bowditch thought it would be unwise to suggest a bill to Congress, until public opinion was thoroughly educated and State Boards were generally organized. He thought, however, that some good might be done by bringing a general statement of the advisability of a future organization before Congress, though not in the shape proposed by the Committee.

Dr. Toner, one of the Committee, did not insist on the form offered. Nearly every measure going before Congress has a bill appended. This one would show that body that legislation would be expected from it on that subject. He favored the publication of the bill in the Transactions, and its being reported to Congress, so as to attract public attention. We had better, as an association, lead than follow.

Dr. Harris said that before the next census, Congress would have to do something to secure a better census of the public health. He alluded to the various advantages to be derived from a central body, such as a National Board. This Section might itself originate a certain class of reports to be brought before every Congress and Legislature. Quarantine and other questions must be made national questions altogether. The South and West are very anxious that Congress should act; but he thought little good could result from asking Congress to act now. In New York an organization had been secured which in a few years will be perfected, so far as water-supply and drainage especially are concerned.

Dr. Hunt did not think it was necessary to have all State work perfected before going to Congress. He questioned whether they should carry the proposed bill to that body, but influence should be brought to bear on members of Congress individually. It would be well to bring to the attention of Congress the fact of defects existing in the method of taking the medical census, in the interest of universal health. They might act on this, when they might refuse to do so with a bill covering a vast area. We may get special legislation as exigencies may arise, such as yellow fever, when we cannot obtain general laws. Such had been his experience in New Jersey, where, although met with refusal as to the establishment of a State Board, the mere agitation had procured the institution of a Sanitary Association, the aid of the public press, and the education of the popular mind.

Dr. Foster thought a bill passed before the public were thoroughly educated to its necessity would be a dead letter. The States should be in advance of any national action, although Congress might be invoked on special points, as already suggested.

Dr. Dowell, of Texas, spoke of the favorable effects of agitation in Texas.

Dr. Hartshorne suggested the advisability of appointing a Committee of Conference on the subject of a National Health Bureau, with power to act according to circumstances.

Dr. Lee, of Pennsylvania, spoke of the difficulties of legislation in that State. He thought that, as physicians urging the necessity of national legislation, we should not be too modest. A petition to Congress, with an accompanying bill, might awaken that body to the importance of the subject.

Dr. Bowditch offered the following: *Resolved*, that the Section recommends that the following vote be passed by the Association: 1. That the American Medical Association earnestly urges upon Congress to devise some plan whereby a national sanitary organization shall, as soon as possible, be established: 2. That the above vote be forwarded to Congress by the proper officer of the Association.

Dr. Billings inquired whether any action had ever been taken by this Association with regard to the formation of State Boards.

Dr. Bowditch asked whether any report had been made by the Secretary of the Association as to the appeal made by its officers annually to the States for the establishment of State Boards.

Dr. Toner did not think there were more than two states indifferent to the subject: in less than five years, he predicted, a majority of the States would have State Boards of Health.

Dr. Hartshorne reminded the members that the very object in having this Section organized at first was to urge this matter of public health. Its duty was to watch the auspicious time for action, and not be too precipitate.

A motion of Dr. Billings to receive the report and discharge the Committee was adopted.

Dr. Bowditch's resolutions being in order, Dr. Hunt suggested, as a modification of the first resolution, that the Association urges upon Congress the devising of some plan whereby the National Government can secure such information bearing upon the health of the nation as shall be of service in its promotion. The resolutions were adopted.

Dr. Toner, as committee on Dr. Dennison's paper, said it was a little rose-colored in favor of Colorado for consumptives, but a valuable report; which, on motion, was referred to the Committee of Publication.

The report of Dr. Linthicum, of Arkansas, on the water-supply was presented and similarly referred. Dr. Benjamin Lee, of Pennsylvania, then read a paper on the "Trials and Triumphs of the Sanitarian."

On motion of Dr. Harris the Chairman and Secretary were directed to prepare a concise statement of the particular subjects upon which action of the National Government is necessary, and a simple resumé of the points and reasons showing the nature of the work which needs to be entrusted to the State Boards of

Health; such statement to be presented to the next annual meeting of the Section.

After listening to a paper on Yellow Fever, by DR. DOWELL, of Texas, the Section adjourned *sine die*.

Correspondence.

SALICYLIC ACID IN RHEUMATISM.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—At the time of the appearance in the MEDICAL RECORD of the first article relating to the use of salicylic acid in acute inflammatory rheumatism, I had in charge a patient suffering with that "most unkindest" affection.

Mr. M., aged 28 years, a healthy working man, of good habits, and employed as janitor in the public school buildings, was seized suddenly and rather violently on the morning of April 18. The attack was ushered in with the usual symptoms; and at the time I concluded to try the salicylic acid the disease was pursuing the even tenor of its way, having reached the eleventh day. At this time the articulations in the limbs and upper extremities were greatly swollen, intensely red, and very painful. The patient was helpless, and it was with great difficulty that he could be moved.

A vigorous alkaline treatment, with quinine and colchicum during the latter part of the time, had resulted in no apparent benefit. Perspiration was profuse, the urine alkaline in its reaction, and the patient very much prostrated. The pain was intense and constant, except when the patient was under the influence of an anodyne. I ordered the acid given in five-grain doses every hour, the vehicle being equal parts of glycerine and water. After the sixth dose I noticed a marked reduction in temperature. The extremities became cold, the circulation thready, and there seemed to be an entire loss of memory. These conditions rapidly gave way to stimulation, however, and in fifteen hours after the administration of the first dose the pain and swelling had entirely disappeared. On the second day after beginning the acid treatment the patient took his dinner at the table, being able to feed himself. Treatment was continued for two days longer, the doses being given at intervals of three hours. The patient made a good recovery, there being no return of the disease.

On May 17 another case of equal interest to me came under my observation. Mr. E., aged 22, a plasterer by trade, was taken with acute inflammatory rheumatism, affecting the upper extremities. Two years ago this patient had a similar attack, and the disease gradually extended until most of the articulations in the body were affected. The usual treatment was given, but the case continued twenty-six days, and I had but negative evidence that my treatment had been of any avail. When I called to see him during his last attack I was met with: "Doctor, I'm gone up again for twenty-six days." He was suffering intensely, and I at once gave him ¼ gr. morphia, subcutaneously, after which I ordered the acid as before. In this case the reduction of temperature was not so marked, and there was an absence of the unpleasant symptoms noted in the first case. The result, however, was all that could be desired. In twenty hours the pain and swelling had disappeared, and in one week the patient was pursuing his usual avocation. In this case no medicine whatever was given except acid—save the ¼ gr. morphia used subcutaneously.

GEO. O. MORGRIDGE, M.D.

WEST LIBERTY, IOWA, July 7, 1876.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from August 6th to August 12th, 1876.

GREENLEAF, C. R., Surgeon. Granted leave of absence for one month, with permission to apply for an extension of one month. S. O. 115, Dept. of the South, Aug. 8, '76.

HAPPERSETT, J. C. G., Surgeon. To report to the Commanding General Mil. Div. of the Atlantic, for assignment to duty. S. O. 162, A. G. O., Aug. 9, '76.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending August 12, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Aug. 5.....	0	4	7	2	4	20	1
" 12.....	0	14	16	3	2	32	1

CHOLERA IN CATS.—A disease resembling cholera has been epidemic among cats at Delhi.

CHOLERA.—Outbreaks of cholera are reported from various parts of India.

THE PLAGUE is reported to have ceased in all the localities where it has recently been prevalent.

SURGEON TO THE POPE.—Dr. Ceccarelli has been appointed "secret surgeon" to the Pope, a place left vacant by the death of Dr. Vincenzo Sartori.

AN OLD UNIVERSITY.—The University of Upsala (Sweden) will celebrate in September of next year the four hundredth anniversary of its existence.

WILFUL SPREAD OF INFECTIOUS DISEASE.—A woman was recently arrested and fined for removing her child from the London Fever Hospital before the infectious period of scarlet fever, from which she had been suffering, had passed away, or the clothes had been properly disinfected.

CHLORAL PLASTER.—For neuralgia, rheumatic pains, etc., use the ordinary emplastrum roborans, and powder it with the chloral. Apply the plaster to the affected part, and leave it from twenty-four to forty-eight hours. When taken off, the skin is found studded with vesicles; these are to be pricked with a pin, followed by a dressing with simple ointment. The pain vanishes long before the vesicles are dried up.—*Lancet.*

Original Communications.

SCARLATINAL HÆMATURIA.

A CASE WITH REMARKS.

By V. P. GIBNEY, A.M., M.D.,

ASSISTANT PHYSICIAN TO THE HOSPITAL FOR THE RUPTURED AND CRIPPLED, NEW YORK.

RENAL hemorrhage occurs so frequently that, unless it occur in excess, no alarm need be excited on the part either of the attending physician or the patient. We not infrequently meet with many cases of acute desquamative nephritis wherein the urine contains blood and blood-casts; still, this condition of affairs is not the preponderating sign of the disease. Albumen is found in abundance, œdema and anasarca are present, and occasionally uræmia becomes an alarming feature. With such we are all familiar, and a mere reference will suffice.

Trousseau* says that, in point of fact, hæmaturia is a rather common occurrence, but frequently escapes observation. The admixture of acids with the urine gives it a blackish color, *i.e.*, when the blood is pure. The text-books in general devote a brief mention to the subject, all concurring in its insignificance. Dr. Loomis† says "the bleeding which accompanies inflammation of the kidneys in the infectious diseases is never severe or constant."

Hæmaturia is symptomatic of purpura, scurvy, cholera, cancer, the eruptive fevers, malarial poisoning, mental emotion, etc. The points in differential diagnosis need not occupy time in this connection. Suffice it to say, however, that any one with a history of the case and an ordinary microscope need not go far astray. When it exists as a sequel, or complication even, of scarlatina, albumen will, as a rule, be present, and the brownish hue given to the deposit on the application of heat or nitric acid will generally decide the question.

From the following history and a reference to the current literature on the subject, I hope to deduce some practical conclusions.

CASE.—B. M., æt. seven years, female, admitted to the Hospital for the Ruptured and Crippled, May 8, 1875. The disease for which she came under treatment was morbus coxarius, four months' standing, little deformity as yet having arisen. She had been in the Roosevelt Hospital two or three months for the same disease.

On *June 18th*, same year, a rose colored eruption appeared over the neck, shoulders, and extremities. This, taken in connection with constitutional disturbance twenty-four hours previously, and a concomitant redness of the fauces, the character of the eruption, etc., made the diagnosis of scarlatina simplex comparatively easy. Ten days later, the characteristic desquamation presented, no complication having arisen during the attack. In fact, the case proved an exceedingly mild one, and for this reason we watched the more closely for sequelæ.

July 17th, twenty-nine days from the beginning, the child manifested slight indisposition, for which a cathartic was ordered, and directions were given the nurse to procure a specimen of urine for examination. This was not procured until the following day, when the color was found of a dingy raspberry red, the specific gravity 1020, albumen about fifty per cent., a deposit, after standing a short while, of blood, while the microscope revealed fibrinous and blood-casts, with red and white blood corpuscles in great numbers scattered throughout the field.

There was no œdema anywhere to be found. One drop of the oleum Tiglii produced a copious evacuation, and as the kidneys were acting fairly, and no urgent indications were present, the treatment adopted was expectant.

July 20th.—On qualitative analysis, the urine gave the same results as obtained at last examination, with the exception of a less proportion of albumen.

July 22d.—Specific gravity 1036; light precipitate of albumen; blood corpuscles abundant. The quantity of urine voided to-day, scanty and being still more scanty on the following day, the infusion of digitalis was ordered in drachm doses every two hours, and mustard sinapisms were applied over the region of the kidneys.

July 24th.—Nausea and vomiting; profuse alvine evacuations, highly colored, with bloody urine.

July 25th.—Urine deep red; specific gravity 1023; albumen 15 per cent.; blood casts. A.M., pulse slow and intermitting at every tenth beat; digitalis discontinued; brandy and milk rejected by the stomach. M., no intermittence of pulse; stomach retains the milk and brandy, but nothing else. P.M., pulse regular; three evacuations.

July 26th.—Symptoms all denote improvement.

July 28th.—Quantity of urine in twenty-four hours, six ounces; specific gravity 1006; albumen 25 per cent.; field of the microscope full of blood corpuscles; an attack of dysentery through the night, with tenderness on pressure over the iliac region this morning. Digitalis renewed.

July 29th.—Dysentery arrested spontaneously.

July 30th.—Pulse intermits at second beat; as yet no sign of œdema; no derangement of any of the special senses; urine still bloody and albuminous.

July 31st.—Pulse still intermittent; digitalis three times a day, instead of every two hours; the milk and brandy, which was begun on the 25th, has been continued.

Aug. 6th.—Since the 31st ult. the patient has been steadily improving, that is, eats her food with a greater relish, passes a larger quantity of urine, which, however, is still highly colored with blood, and is gaining strength, although greatly emaciated from the protracted illness. May be considered as convalescing.

This morning, forty-nine days from the invasion of the scarlatina, there is noticed for the first time a slight otorrhœa, left side. There has been no otalgia or other symptom of otitis; no otoscopic examination was made to detect the suspicious prominence of the membrana tympani, the importance of which we fully realized, and our only excuse for not doing so was the alarming hæmaturia and the absence of any symptoms calling attention to the ear.

August 10th.—The amount of blood in the urine evidently on the decrease.

August 13th.—Nausea and drowsiness this afternoon, while the vital signs are normal. Mustard pediluvium ordered.

August 14th.—The symptoms of yesterday are absent, and the patient is much better.

August 18th.—Still slowly improving; the otorrhœa has ceased, and the otitis, if such existed, has given rise to no inconvenience whatever.

August 28th.—One or two recent examinations of

* Clinical Medicine, vol. i, p. 152.

† Diseases of the Respiratory Organs, Heart and Kidneys, p. 419.

the urine have failed to detect any albumen or blood, and the disease is regarded as arrested, while a tedious convalescence is expected.

With reference to what bearing the vital signs may have on the subject, I have to say that the thermometer was used when the hæmaturia first appeared, and several days subsequently. No elevation of temperature beyond 99° being found, I made no record in my notes, but remember the circumstances sufficiently well to add this by way of postscript. The pulse I watched while administering the digitalis, and from neither pulse nor temperature, nor yet from the appearance of the child as seen two and three times daily, did I find any evidence of febrile disturbance worthy of attention. In fact, I wondered at its absence.

January 14, 1876.—Since the date of last note, not an untoward symptom has arisen. The strength has been slowly returning, and now she is a healthy-looking girl, muscles firm and well developed. Tonics and stimulants have been employed during the past three months.

At this time, also, no evidence of hip-joint disease can be detected, save a perceptible halt in her gait, and even this she can obviate when she makes an effort to that effect. There is no resistance to motion in any direction.

May 23*d*.—Discharged, cured of the joint disease—a spontaneous cure having been effected. There had been no recurrence of the hæmaturia. An attack of parotitis during the latter part of March gave rise to no complications or sequelæ. A fall on the fifteenth of May induced a certain amount of stiffness about the hip-joint, but two or three days' rest in the recumbent position brought about a complete recovery.

The point to which I would call especial attention is the absence of anasarca or œdema. At the time, this seemed difficult of explanation, and I consulted the text-books at hand. Harley* explains the existence of nephritis without dropsy, on the theory that only one kidney is involved. On reflection, this seems plausible enough; for physiology teaches that the kidneys act alternately. Bernard † has proved this alternate action in animals; and Erichsen, in a case of extroversion of the bladder, noted the same with regard to man. It is also well known that extirpation of one kidney from a living animal is not necessarily fatal. Physiologists have frequently performed the experiment, and no indication of disturbance of the eliminative functions has been observed. Pathology likewise furnishes abundant proof in sustenance of this theory. Many cases of pyonephrosis are recorded, wherein is total destruction of one kidney, and no œdema occurs. We have cancerous kidneys, with no accompanying œdema of the extremities.

On the other hand, we have theories advanced by prominent authors, to some of which I shall refer, as this is a subject peculiarly inviting to those fond of speculation. Loomis,‡ to whom I have already referred in discussing the etiology of dropsy, says: "Undoubtedly the most constant and perhaps the most efficient cause is the direct effect of the excess of urea upon the capillary circulation, and upon the composition of the blood." In the case under consideration, there were no evidences toxically of excess of urea in the circulation at any period of the disease, unless, perhaps, we except her condition on the morning of August 13th, when nausea and drowsiness were present; yet even then the vital signs were normal. *Urea* is claimed by Dr. George Johnson § to be a powerful diuretic, and to the excess of this in the system he attributes the copious flow of urine, which occurs during convalescence from acute Bright's disease. When injected into the veins of a dog, he further states, it quickly excites an abundant flow of urine. I should like to quote more at length from this author, but a lack of space forbids.

Another theory for the cause of dropsy is, that it is due to the sudden removal from the body of a large amount of albumen. If that were true, our patient should have been dropsical. Niemeyer † regards the dropsy in croupous nephritis as due to a suppression of urine, causing an increase of pressure upon the veins of the kidney. In my case there was no suppression, and this fact, taken together with the abundant hæmaturia, and the absence of any suppressed action of the skin, affords a plausible explanation for the lack of dropsy.

Johnson adduces a very good argument to prove that the suppressed action of the skin in the desquamative period acts as a concurring cause of dropsy in albuminuria. "Frerichs," so Steiner states, ‡ "has described a rare form of dropsy, without any disease of the kidneys, occurring after scarlet fever, which he believes to be due to paralysis of the cutaneous nerves by exposure to cold during desquamation." Steiner himself has observed a similar case. Louis Thomas, § in his chapter on Scarlatina, says: "It is evident that the dropsy is connected with some affection of the vaso-motor nerves, and not dependent alone upon changes in the kidneys and loss of albumen."

Now, as I have already intimated, my impression is, that where renal hemorrhage exists to such an extent, and so passively as existed in the case herein recorded, we can have no cause for dropsy, whether one or both kidneys be involved. I am not prepared to assert this dogmatically, but hope to investigate this point still further as opportunity shall offer. It is curious to note the percentage of dropsical patients as recorded by different observers.

In Vogel ‖ I learn that Haidenhain found eighty per cent. of his scarlet fever patients affected with dropsy; that Jas. Miller found twenty-seven per cent.; Wood, of Edinburgh, twelve and one-half per cent.; Frerichs, only four per cent. Those interested in statistics may consult a paper read by Dr. Bradford Thompson ¶ before the Medical Journal Association of New York, January 10, 1873. The chapter in Ziemssen will repay a careful perusal.

Throughout the journal literature of the day I have searched for analogous cases as diligently as the debilitating influences of a summer month would permit, and in this labor I have been very kindly assisted by Dr. E. F. Horst, a fellow interne. I succeeded in finding two cases on record, and shall refer to them as briefly as possible.

At the Clinical Society in London, Mr. Arthur Andrews presented a case for Dr. Gee,** with the following history: A healthy young man incurred a nephritis from exposure to cold. The urine was highly albuminous, and presented the other signs of the disease. On the forty-third day only a trace of albumen was present, and the man was considered relieved. On the forty-fourth day, however, an intercurrent scarlatina appeared, and the urine *immediately* became almost

* Urine and its Derangements, p. 27.
† Flint's Text-Book of Human Physiology, p. 404.
‡ Loc. cit., p. 483.

* Lectures on Bright's Disease, p. 32.
† Practical Medicine, vol. II., p. 19.
‡ Compendium of Children's Diseases, p. 341.
§ Ziemssen's Cyclopædia of Practical Medicine, vol. II., p. 257. Diseases of Children, p. 443.
‖ American Journal of Obstetrics, May, 1873.
¶ Med. Times and Gaz., vol. I., 1870, p. 520.

black from blood, and was loaded with albumen. Both blood and albumen decreased until the fourteenth day, then increased again to the forty-second (eighty-fifth day of the nephritis). The points of interest in this case were:

1. Sudden and abundant hemorrhage at the invasion of the scarlatina.

2. Rapid diminution of the hæmaturia until the ninth day of the fever, when there was no albumen.

3. Recurrence of the albumen when the urine of uncomplicated scarlatina becomes albuminous for the first time and its continuance from this period.

Bramwell,* in an article on Scarlatinal Anasarca and its Treatment, reports the case of a schoolmaster whose school the disease had invaded. He felt a little unwell one day, and consulted the doctor, who found the face puffy, the urine albuminous, and from the attending circumstances had no difficulty in arriving at the true diagnosis. A few days later both lungs became congested; convulsions followed. Venesection was performed, and "great relief" is recorded. Three days subsequently a phlegmonous inflammation of the arm which was the seat of the venesection supervened, pus formed, and the constitutional disturbance ran high. The urine became exceedingly bloody for several days. The administration of ergot was followed by a cure. The two cases thus related present some points of similarity with the one which affords a text for this paper; yet neither can be looked upon as pure and uncomplicated scarlatinal nephritis. I am unable to learn from the reports whether the dropsy existed during the hæmaturia. That it did not exist to any great extent, I think I am justifiable in assuming from negative evidence. Niemeyer† records a case of parenchymatous nephritis, one year's standing, in a girl, wherein œdema was delayed until one week after a venesection, and infers from this that the hydræmia which, though extant in moderation, was so much aggravated by the blood-letting as to cause the dropsical symptoms to appear. In the second of the two cases above mentioned, it might likewise be inferred that the hæmaturia, coming on the third day after venesection, was a dropsy into the kidneys, or, what amounts to the same thing, transudation of blood and serum through the Malpighian capillaries into the tubules. Local œdema, we know, is a very common occurrence.

In my case I can find no complications, unless we consider the hip-joint disease a complication; and from the absence of any acute symptoms I am disposed to exclude this as totally irrelevant. It may be significant to observe that during the illness a spontaneous cure of the joint disease seems to have taken place. The rest in dorsal decubitus that length of time would most likely have effected a cure. If we reject this, the question of metastasis of disease presents for consideration. In the article in Ziemssen to which reference once or twice previously has been made, I find an interesting paragraph bearing directly on this point, and as it expresses *multum in parvo*, I shall take the liberty of quoting it in full:

"When scarlatina occurs in the course of other diseases which are then generally irregular, it frequently increases their severity; according to Rilliet, especially if the other affection implicate organs which are apt to be affected by the scarlatinal poison. Thus, for example, Löscher regards the existence of a previous tuberculosis of the lymphatic glands as a very bad sign in scarlet fever; the more severe and extensive this lesion is, the more violent is the course of the disease, the more frequent its complications (meningitis, hydrocephalus, pleuritis, dropsy), and the more unfavorable its termination. On the other hand, other diseases, which are indifferent to the scarlatinal poison, not only do not change the character of the scarlet fever or interfere with recovery, but they may even exercise a salutary influence. Barthez and Rilliet state that scarlet fever has a favorable influence on phthisis—an observation which is approved by Oeiters but rejected by Hebra. . . . . Prevot has seen scrofula in a child cured by the occurrence of scarlatina maligna with the formation of abscess. The child afterwards permanently regained vigorous health."

Now if morbus coxarius be a strumous disease, scarlatina should effect a cure. This case was cured during the scarlatinal attack, which goes to prove that morbus coxarius is one of those diseases on which scarlatina exercises a salutary influence; probably it is strumous. I could show, had I not already prolonged my paper, cases of hip-joint disease seriously aggravated by the intercurrence of scarlatina.

Why does excessive hæmaturia occur in connection with this form of Bright's disease? Biermer‡ says that in the severer cases with hæmaturia and albuminuria the substance of the kidneys is hyperæmic and softened, and as a consequence the seat of numerous capillary hemorrhages. Huegenin has demonstrated that in scarlatina hæmorrhagica a diphtheritic affection of the mucous membrane of the pelvis of the kidney may exist, giving rise to copious hemorrhage. Many cases prove fatal, though none, so far as I have learned, wherein the kidneys were the seat of the hemorrhage.

Lovegrove† reports a case of scarlatina in the person of his own son. On the fifteenth day, after a mild attack, with enlargement of the parotid gland and otorrhœa as complications, a bright red hemorrhage issued from the mouth and nostrils, a branch of the internal carotid in all probability having ruptured. He refers to one or two similar cases unpublished. Then we have hæmatoma scarlatinosum. This usually appears on the neck. Dr. Huber‡ reports an interesting case in a six-year-old boy.

The treatment, of course, depends on the gravity of the disease of which the hæmaturia is symptomatic. If, as is plausible, the blood thrown off with the urine prevents the occurrence of dropsy and at the same produces no alarming loss of strength, no special treatment is indicated. Proper mangement is the one thing needful. I have had no experience in the use of ergot in hæmaturia, and consequently cannot speak advisedly.

In conclusion, let me enumerate the points I have endeavored to bring out in this communication.

1. The persistence of the hæmaturia for a period of four weeks.

2. The absence of any marked constitutional disturbance other than an unusual degree of emaciation.

3. The absence throughout the attack of any general or local œdema.

4. The influence of the intercurring scarlatina on the morbus coxarius.

115 East Forty second Street

Cod-liver Oil.—One and a quarter million gallons of cod liver oil have been made in Newfoundland this season.

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* Edinburgh Medical Journal, June, 1875.
† Lancet, vol. i., p. 89.

* Ziemssen, [illegible], vol. II., p. 251; [illegible], vol. II., p. [illegible].
† Lancet, vol. i., 1874, p. 729.
‡ Deutsches Archiv für klin. Med., VIII.—s. 122

UNIFORMITY IN THE PRACTICE OF PHYSIC.

By E. SEGUIN, M.D.

The first want of the members of an International Medical Congress is to understand one another; but we have not yet arrived at this ideal of internationalism. The unity of language founded upon the mother-tongue of Europe has been broken when it became evident that the Latin, instead of serving to propagate ideas, was used by the Congregation of the Index to spy their eclosion (hatching) and to burn them by the hand of the hangman. Fra Paolo hid his discovery of the valves of the veins, and its consequences, in the library of Padua for fear of the inquisition; Luther had to translate the Bible to cause it to be read; and Descartes lived in voluntary exile, and published his treatise on *The Method*, in French, in order to speak freely. So that the diversity of the languages we write since this revolution is as likely and as necessary to insure everywhere the freedom of thought, as to favor the complete expansion of individual and national geniuses.

However, one cannot fail to see that this diversity opposes a large obstacle to the interchange of ideas, even of feelings—a something similar to a veil spread at the frontiers to arrest them, and which prevents the fecundation which takes place by the natural process of distant pollenization.

This defect was first felt by the naturalists and chemists, who, already at the end of the seventeenth century, tried to create nomenclatures, symbols, and measures, in view of their common acceptance by all the nations. This uniformity, as well as the other one previously created for the mathematical language by our masters, the Arabs, permit us to read, almost without linguistic preparation, the books of chemistry, of physics, and of mathematics written in almost any language.

We would like to be able to say the same thing in medicine; but daily experience has taught all of us how difficult it is to read foreign observations, and even to compare ours with those of our fellow-citizens and near neighbors.

This anarchy, which seems the arcbeus of our profession, caused incalculable retardment in medical advancement, and has been the principal theme of the protestations, whose series forms a chain of which the present memorial is but the last link.

1832.—Louis, Andral, Chaumel, founded the *Société Médicale d'Observation*, whose main object was to influence the medical mind, to elevate it to the comprehension of the importance of observing all the morbid phenomena with precision, to report all the cases with mathematical exactness, to propagate and develop the *numerical method of observation* of Louis. If such men had been supplied with the instruments of positive diagnosis recently invented, the results of their efforts would not have remained limited to a small circle of devoted disciples.

1860.—The celebrated chemist, Dumas, demanded, in the preface of the French Codex, the *unification* of the codex of all the parts of the globe.

1865.—At the first Pharmaceutic Congress meeting at Brunswick, the question of the uniformity of medical preparations and doses filled several sittings; Danckwortt made on it a favorable report, which was supported by Robinet and Guibours, and unanimously accepted.

1867.—At the second Pharmaceutic Congress of Paris, where were present the delegates from seventeen nations, the question of establishing everywhere the uniformity of officinal preparations was then commended: "To study the means of composing a codex, or legal formulary, which could be accepted as universal for the officinal preparations whose uniformity in all civilized countries is most desirable."

The learned Mialhe made, upon the proposition, a report whose perspicuity is characterized in the following extract: "At a time when the means of communication between people become so easy, we feel for all the men stricken by the same diseases, and suffering the same pains, the necessity of a uniformity of treatment, based upon the unity of pharmaceutic preparations in all civilized countries, so that a medical prescription could be identically executed in Paris, London, Vienna, Berlin, or in the United States, etc., with the same ease for the pharmaceutists and the same security for the patients."

Upon this report the Congress of 1867 decided, that: (1) A universal codex must be adopted. (2) It will be written in Latin. (3) The metric system will be used in it. (4) A special commission will be named *ad hoc*, and will begin immediately.

Not less important and more precise were the resolutions received from Spain before the closing of this Congress of Paris.

1867, *August* 21.—The College of Pharmacy of Madrid concluded a long discussion on the same subject, by the adoption of the following resolutions: (1) Realization of a universal pharmacopœia, which must be the result of the concourse of representatives of all the medical sciences, and keep in view the particular conditions of general health in the various countries. (2) The redaction of this universal pharmacopœia can be commenced immediately, with the assent and concourse of all the nations who feel an interest in its execution. (3) As soon as the principle will be admitted, it would be next in order to charge an international commission with the redaction of this code of pharmacy, and to cause the compound preparations to be reduced in their composition to their simplest elements.

1869.—The third International Pharmaceutic Congress met at Vienna, where the question of a universal codex came up again. The decisions of the former Congress were reaffirmed, and the Society of Pharmacy of Paris was intrusted with the work preparatory to the realization of the plan of a uniform pharmacopœia. The names of the commissaries testify of the importance attached to the work: Buignet, Lefort, Mialhe, Wurtz, Planchon, Junghfleisch, Roucher, Duquesnel, Guichard, Mayet, Méhu, Boudet, reporter. His report, delayed by the Franco-German war, was read.

1874, *July*—and the Society of Pharmacy of Paris voted that it would serve as the preface to the project of the international codex.

1874, *August*.—At the International Pharmaceutic Congress of St. Petersburg twelve nations were represented, Boudet presented his report, and Méhu deposited the project of universal codex, elaborated by the Pharmaceutic Society of Paris. After three sittings given to a thorough discussion of this instrument, was voted the unfortunate proposition of asking the Russian Government to ask from the other Powers the nomination of commissions of inquiry, which would have capacity for modifying or accepting the proffered plan. It was to play the precious value of time on an illusion. What we cannot do ourselves for ourselves, no government can do it for us. The same illusion begged the kings to cure scrofula till Eliza-

beth refused to do it. Two years were thus lost without reckoning the discouragement.

However, this check from outside gave the next reporter, Gille, the occasion to view the subject on a broader aspect. On one side, the question of uniformity of medicaments must be appreciated by the druggists and pharmaceutists in regard to the purity of the substances, and the reactions of the primary elements; but, on another side, the physicians and physiologists are the judges of the action of the chemical produces, and of the compound preparations from the pharmacy on the living organism. Therefore, Gille resolved to present his work to the next International Medical Congress, where he said—

1876, *September*—"The pharmaceutists have, so far, almost alone prepared the labors which will likely serve as the basis of an international codex. It would, however, be very useful to not engage ourselves much further in a work of this importance without the help of the experience of physicians; for, to deprive ourselves completely of it would expose to severe criticism, and assume a responsibility which physicians can bear better than us. I am, therefore, of the opinion that if an International Commission must be charged with the final redaction of a universal codex, we ought to admit in it some physicians, veterinary surgeons, etc." This was a great step in the right direction: but this reporter did not advance in it alone, as we shall see.

The question of uniformity in medicine had already been the object of individual studies and of collective resolutions in several medical societies. The American physicians had treated of it, and acted upon it several times during the last years:

1873.—Before the New York Medical Journal Association; before the American Medical Association assembled in St. Louis, Mo.; before the British Medical Association, meeting in London; at the Association Française pour l'Avancement des Sciences, Section of Medicine, meeting in Lyons.†

1874.—Before the American Medical Association, assembled at Detroit, Mich.;* at the British Medical Association, meeting at Norwich; at the Association Francaise pour l'Avancement des Sciences, meeting at Lille.

1874-75.—Intercurrently, the question of the uniformity of the means of medical practice and observation had been the object of several conferences in Paris, where the Professors Marey, Potain, Lépine, Ball, Brouardel, and Lorain, till his death, showed a great interest and the desire of coöperating in the plan of uniformity, whose *ensemble* and most of the details are entirely of American origin.

1875, *June*.—The American Medical Association, meeting at Louisville, Ky., after hearing the report ‡ and upon the proposition of its General Secretary, W. B. Atkinson, delegated Drs. Adrian and Harwood to the International Medical Congress of Brussels, commissioning them expressly to give the assent of the American profession to the introduction of the French metrical system in physic, and to ask the Congress to take the measures proper to insure uniformity in all that pertains to physic all over the civilized world.

1875, *September* 23.—The memorial of these reporters was read in French by Dr. Collignon. *During the previous day*, Meltanche Sor had opened the Section of Otology by the question, "On the means of measuring audition, and of registering its degrees by a uniform method in all countries." In the same Section, Sapolini demanded that uniform inquiries be made internationally on the causes and frequency of the surdi mutity, surdity without mutism, mutism without surdity, and stutterism. *The following day*, in the Section of Ophthalmology, Donders proposed to introduce the metrical measures, instead of the English, French, and Prussian inch, in the measurement of the glasses of spectacles. Javal supported the proposition, the more heartily, since Giraud-Teulon had already graduated his test-glasses accordingly on the metric scale, and Snellen had, too, accommodated his type-letters to the metrical numeration of visual defects.

So the question of the uniformity of instruments, scales, and doses in physics was treated in three Sections of the Congress of Brussels, supported by eminent professors, in its application to distinct specialties, to pharmacy, to otology, and to ophthalmology, and exposed in its generalities by delegates who had expressly come from the United States to urge the adoption by the Congress of this plan of uniformity of language and of action, without which the internationalization of physic will remain a chimera.

Who could believe, if it was not a fact with its dates, that these men of talent or eminence who had come from so far in Belgium to support the same principle—medical uniformity—in several of its special applications, did not try to see and to understand each other; and that, united by the bonds of a common idea, they remained isolated in the bounds of their specialty.

Therefore, these men spoke under the same roof, in adjacent chambers, without communicating with each other, or concerting their efforts; without suspecting that they were giving one of the finest examples of medical anarchy, the best demonstration *per absurdum* of the necessity of uniformizing and of coördinating all the parts of our art, and of internationalizing the whole.

In consequence, the propositions above quoted received the approbation of the members of the Congress, but the Congress, as a body, did not come to any practical conclusion.

1876, *June*.—The American Medical Association meeting in Philadelphia, having heard the reports of Harwood and E. Seguin (see Transactions, etc., 1876); considering that the theoretical success, and the practical postponement of the execution of the plan of proposed medical uniformity are, one, the proof of its excellence, the other, the demonstration of the force of mind-and-habit prejudices which the projects are meant to conquer, sent this time to you a special delegation composed of the first originator of the plan, and of its last reporter in Brussels. These were expressly charged with the duty of pleading the necessity of uniformity in the means of treatment, of observation and of language, before this assembly, which, at this very moment, must feel the want of such a uniformity, without which international communications remain, to say the least, incomplete.

1876, *September*.—Thus we are here prepared to sum up the idea of which we have just traced the history, as much to encourage those who are apprehensive of novelties, by showing what long roots this one has a ready shot in the muck of physic, as to point out, on the road of those who will follow, the difficulties previously encountered.

It remains now to say a few words of the general bearing of the subject. Of that which distinguishes the American plan of general uniformity from those successively presented in the interest, and for the advancement of special parts of our art; namely, from

* Transactions, etc., 1874.
† See *Compte rendue*, etc., page 828, et s.
‡ Transactions, etc., 1875, page 31.

those of Dumas, Mialhe, Gille, Boudey, Meltanche, Sapolini, Javal, Donders; the adoption of which would improve some parts, but not the whole art.

In contradistinction, the American plan—which is nothing else than the *Numerical Method of Observation*, introduced by Louis forty-four years ago, but rendered more precise and practical by the recent invention of new means and instruments of positive observation—is at once distinguishable by the broadness of its applications to physic; being at the same time a principle and a method. And as nobody can sum up the influence in physics and metaphysics of the Cartesian and Baconian methods, so, and more, would it be futile to pretend to calculate the influence which will obtain on the progress of physic, by a method of observation based on mathematical uniformity; but we can already foresee some of its consequences.

The uniform application of the numerical method will render infinitely more abundant, accessible, readable, comparable and trustworthy, the observations on which the leaders support their theories or discoveries, and by which the country-practitioner will connect his mind with the medical movement, and eventually act his part in it. It is so that the records of each will be of service to all. The practice of physic will gain in certainty in several ways. The diagnosis will become more and more precise and mathematical. The course of diseases will be more and more represented in figures, or idealized in graphic traces.

The action of medications on the organism, and the reaction of the functions on the treatment will be registered and reckoned as book-accounts.

Physicians are expected to no more write their prescriptions or borrowed slips of paper without keeping a copy, or on druggists' blank advertisements; neither to record their cases on pocket-books which contain the names of all the saints to be daily invoked to obtain a cure, instead of on books on which can be noted the physiological signs, or aberrations of function, which characterize diseases.

The uniformity of the tables of observation used in private and hospital practice, will furnish the sure elements of a medical statistics, not only in regard to the transitory population of hospitals, but to the families treated at home; it will present for the first time the true and full data for a history of health and disease.

From a different, if not a higher point of view, the mind of physicians will gradually relinquish the process of guessing and believing for the one of trusting their own senses and acting according to their own impressions and counsel. Thus the bulk of our knowledge will steadily be categorized in its natural divisions of savage traditions, barbaric panaceas, priestly impositions, rational systems built on hypothesis, physical and positive acquisitions of experience mathematically coördinated.

In presence of these well-defined series, who will not, with equal eagerness, scorn at the first ones, and try to add a line to the last. When all the physicians will be furnished with uniform means of mathematical certainty all will be enabled to contribute to the general labor; and who can say where our progress of certainty in physics will stop? Physics will be—without any more contest—one of the physical sciences. But let our first word be the last too; no international onward movement is possible without a mathematical uniformity of plan and of understanding.

Such is the sum of the plan of *uniformity in physic*. Will it be opposed on the plea that its vastness renders it impossible? But it is not only possible, it is commenced. Have we not the Reports of Boulet and Gille, the plan of a universal codex of Mehu, the adhesions of Donders, Javal and others in regard to their specialty; the proposition of Bouchardat to actually commence the *uniformization* of medicaments by the most energetic, which would be like a continuation of the labors of Magendie, in which are found his solution of morphine and other preparations of alkaloids which have become officinal, even international.

The uniformity of nomenclature of remedies and of diseases would follow, since there is no reason why they would not be called by the same name the world over.

A double uniformity in our instruments would follow: one mechanical, by which the parts being made of numbered calibres, could be changed without trouble and hardly any expense. The other, more professional, would consist in a uniformity of all graduated calibres, capacities and scales. To not penetrate too deeply in the future, you can at any time declare it obligatory for family practitioners to keep their private clinical notes like those of the hospitals, and devise a greater and gradual uniformity in the latter.

Thus the International Medical Congress can continue, with a view towards a general end, a work begun by individuals who had only in view the improvement of some special parts of our art.

In consequence of these considerations we reiterate before the International Medical Congress of 1876 the proposition enunciated in 1873, 1874, and 1875, under the patronage of the American Medical Association; and we formally ask you: (1) To recognize in principle the legitimacy and the necessity of uniformity in the practice, in the observations, in the records, and in the medical language of civilized nations. (2) To prepare a plan of uniform hygienic and sanitary measures applicable to the prevention or disappearance of contagious and epidemic diseases. (3) To constitute an International Council, charged with the elaboration of the means of establishing a uniformity of nomenclatures, of officinal formulas, of methods, of instruments, of scales, of mètres and tables of registration for pathological cases and physiological experimentations. (4) Also with power to call in men eminent in the sciences and arts accessory to physic, and the most capable of giving to the labors of the council the most simple and practical direction. (5) To head the list by the names of Boulcy, Donders and others already quoted, whose previous labors will have to be taken into serious consideration, and melted, if possible, in the general plan. (6) To give to the council, thus constituted and strengthened, the power and the duty to communicate its report to the next International Medical Congress, which shall meet at Geneva, Switzerland, in September, 1877.

Thus will be rendered possible the continuation of an *œuvre* whose foundation has already occupied thoughtful men during several years—a work which time will achieve, if we diligently labor at it; and which our children will have often to mend, in order to keep it up to the intellectual level of their epoch; since ideas grow, fall, and succeed each other like the leaves of trees. We will have planted the tree, and they will garner the best crops.

DANGER OF VAPOR BATHS.—An old man, aged seventy, recently died in a vapor bath in Paris from cerebral congestion.

Progress of Medical Science.

CILIATED PUS CELLS.—While examining the secretions from the mouth and pharynx of a frog, when irritated by a weak solution of osmic acid, Prof. Neumann, of Königsburg, found certain cells having characters intermediate between those of epithelium and ordinary pus cells—having, in fact, the cilia of the one and the contractility, the size, and the opaque nucleus of the other. The cilia covered but a part of their surface, and imparted to them a rotatory motion, the amœboid changes of form beginning only when the cilia ceased to move. Here are, then, all of Cohnheim's characteristics of pus-corpuscles, and an argument for the occurrence of true epithelial suppuration. Such bodies have, it is true, been seen before, but they have been regarded as ciliated epithelial cells of the part, mechanically detached.—*Centralbl. f. d. Med. Wiss.*, June 10, 1876.

OIL OF THE SMUT OF CORN IN THE TREATMENT OF ECZEMA AND CHLOASMA.—Prof. C. Lombroso reports a case of chloasma of the forehead and cheeks of a year's standing, which he treated on one side with red oil from the smut of corn and on the other with rancid oil from sound corn. The former proved much the more efficacious, removing the patches after three days' use, but the unpleasant effects on the system at large made the patient unwilling to resume its use. The same remedy effected the cure of a patch of eczema on the chin of an insane patient in five days.—*Centralbl. f. d. Med. Wiss.*, April 29, 1876.

ABLATION OF THE CUBOID BONE IN CONGENITAL VARUS.—Dr. H. J. Little says the only cases where this operation can be performed are those where inveterate deformity exists, and which are curable by no other means. Infantile congenital club-foot, he says, can, and ought to be, cured before the age of twelve or sixteen months, before the time a child commences to walk. If properly treated at that time, he thinks the use of splints and any mechanical aid will be unnecessary in walking.—*Brit. Med. Journal*, May 13, 1876.

OPERATION FOR OBLITERATION OF DEPRESSED CICATRICES AFTER GLANDULAR ABSCESS OR EXFOLIATION OF BONE.—Mr. William Adams has performed this operation with great success. So many faces are rendered unsightly by these deep cicatrices, that any operation which results in the removal of the deformities must be a blessing to those afflicted by them. The operation is original, and consists in subcutaneously dividing all the deep adhesions of the cicatrix, by a tenotomy-knife introduced a little beyond the margin of the cicatrix, and carried down to its base, so as to carefully and thoroughly evert the cicatrix which remains prominently raised. Two hare-lip pins or fine needles are then passed through the base, at right angles to each other, so as to maintain the cicatrix in its everted and raised position, where it is so retained for three days. At the end of this time the needles are removed, and the somewhat swollen and infiltrated cicatricial tissue is allowed to settle gradually down to the proper level of the skin. He gives the full history of three such operations in his paper. The permanency of the cure is illustrated by cuts of two cases, in one of which the operation was done nine, and in the other three years ago. The depressions seem to be completely obliterated.—*British Medical Journal*, April 29th, 1876.

DR. REYHER'S REPLY TO KRÖNLEIN.—Not content to leave the vindication of his statistics even in the friendly hands of Prof. Volkmann, Dr. Carl Reyher, of Dorpat, sustains his position regarding the antiseptic treatment of wounds, against what he regards as the misconceptions or misrepresentations of Dr. Krönlein, in a detailed article in No. 4, vol. xix., of *Langenbeck's Archiv*.

EXTIRPATION OF A LARGE MYOMA OF THE BLADDER.—Richard Volkmann reports the removal by him from the bladder of a man of fifty-four, of a myoma the size of a lemon, which was attached by a short pedicle to the summit of the bladder. The symptoms, which had existed for about six months, consisted in difficulty in urinating, in the passage of large quantities of blood, and in the occasional discharge, per urethram, of masses of a fibrous consistency. The diagnosis of the tumor was made by the employment of bimanual palpation, with two fingers in the rectum. The operation, which was performed on Nov. 30, 1874, was preceded by an exploratory perineal section, by which the exact location of the growth was determined. This was immediately followed up by the supra-pubic section of the bladder, through which the polypus was removed. The patient died in collapse on Dec. 3d, as a result of peritonitis and suppuration of the connective tissue about the bladder. Volkmann refers to an analogous case of Billroth's, a notice of which will be found in the MEDICAL RECORD of July 3, 1875.—*Archiv f. klin. Chirurg.* xix. 4.

ON THE SPREAD OF CANCER IN THE LYMPHATIC GLANDS.—DR. BOZZOLO, of Turin, announces the following views as the result of his own observations on the extension of cancer to the lymphatic glands, viz. that the cancer cells first appear in the lymphatic glands in the cavities of the cortical substance; that they are often, even in the beginning, well developed, and many of them have already become horny; and that the endothelial cells of the sinuses and the connective-tissue cells covering the trabeculæ of the reticulum, furnish no traces of cancerous proliferation. Hence he concludes that the cancerous elements are brought to the glands by the afferent lymphatics, quite independently of any proliferation of their connective tissue cells. By the constant accumulation of the cancerous elements in the lymph canals, he says, these become enormously distended, lose their contour, and in advanced stages render it impossible to recognize the structure of the lymphatic gland.—*Centralbl. f. d. Med. Wiss.*, May 6, 1876.

THE COURSE OF CERTAIN BRAIN FIBRES.—A. FREY communicates the following case to the *Arch. f. Psych. etc.*, vi. p. 327. A man died of erysipelas soon after the development of the symptoms of a localized cerebral paresis. At the autopsy the only lesion found was a small, sharply circumscribed focus of softening in the middle of the white substance of the right hemisphere, at the level of the under surface of the corpus callosum, between the nucleus caudatus internally and the fossa of Sylvius externally, at about the height of the anterior third of the corpus striatum. As the paresis involved the whole left arm, left angle of the mouth, and left half of the tongue, it was assumed that the fibres for the innervation of these parts must run through the seat of softening.—*Centralbl. f. d. Med. Wiss.*, May 6, 1876.

STATISTICS OF RESECTIONS OF THE ELBOW-JOINT FOR GUNSHOT WOUNDS.—The following conclusions are taken from Dominik's article in the *Deutsche Militairarztl Ztschr.* No. 1, 1876. The elbow-joint is

the one most frequently involved in gunshot wounds, and the right more often than the left. The expectant conservative treatment of these injuries in the Franco-German war of 1870–1 gave better results as to mortality than in former wars, because it was employed only in the lighter cases. It almost always results in anchylosis of the joint. Resection of the elbow as compared with amputation of the upper arm for gunshot wounds gives a mortality of 23.8 per cent. against 35 per cent. for the latter. In the late war, primary resections, *i.e.*, on the 1st and 2d days, did not give as good results as secondary. Partial resections, when possible, are to be preferred to total. The results of resections of the elbow in the late war have been as follows: with regard to function, 51 per cent. more or less favorable; 49 per cent. anchylosed, and of the whole number only 24.4 per cent. dangling arms. Among the latter, primary resections furnished the largest numbers. The best functional results are from secondary total resections, the worst from primary. A deterioration of the effects of resection in the progress of years, has not been observed since the late war; on the contrary, an increase of usefulness of the resected joints has taken place. Amputations of the upper arm after previous resection of the elbow-joint gave nearly twice the percentage of mortality of amputations of the upper arm in the last war. The mortality of amputations of the upper arm after wounds not involving the elbow-joint was a little less than the average mortality after resections of the elbow-joint.—*Allg. Med. Cent. Zeit.* May 10, 1876.

The Treatment of Santonin Poisoning.—At the session of the *Niederrheinische Gesellschaft* in Bonn, July 5, 1875, Prof. Binz mentions a case of poisoning by santonin, in which a child of two years had taken 1½ gr. of the drug. There were violent convulsions, beginning in the face and extending to the extremities, and great interference with the breathing. She recovered under the use of warm baths, vinegar enemata, plenty of fluids to drink, and artificial respiration. Prof. B. then instituted some experiments on animals to elucidate the treatment, and found that chloral in doses sufficient to produce deep sleep prevented the convulsions, and that ether inhalations exercised a controlling influence over them. He thinks the same treatment may be employed in the human subject, coupled with artificial respiration, and, for purposes of elimination, laxatives and diluents in abundance.—*Rundschau*, May, 1876.

Dyspeptic Asthma.—At a late meeting of the Berlin Medical Society, Prof. Hennoch detailed the histories of several cases of this affection occurring among children, which had come under his observation. The symptoms were alarming dyspnœa, with pallor of the face and lividity of the lips, coldness of the extremities, small and extremely frequent pulse, superficial and very frequent respiration, and great mental apathy. The affection apparently depended upon disturbance of the digestive functions. There were in all of the cases some tumidity and tenderness in the epigastrium; but in spite of the threatening symptoms, not the least indication of cardiac or pulmonary disease could be found on repeated and careful examinations. In one case, that of a child of nine months old, in whom there had been constipation and vomiting, great relief was afforded by the application of numerous dry cups to the chest, and recovery from the attack coincided with the eruption of an incisor tooth. The other patients were children of nine years, three months, and two years respectively, and all were relieved by the action of an emetic or cathartic. Prof. H., although sceptical at first, ultimately came to agree with the opinion expressed by Traube, who saw the first case in consultation; viz., that the disturbance in the stomach excited a reflex vaso-motor spasm in the small arteries, whence followed the coldness of the extremities, imperceptible pulse, stasis in the venous system and right heart, cyanosis, accumulation of carbonic acid in the blood, and dyspnœa. He therefore assigns the name *asthma dyspepticum* to the affection.—*Berl. klin. Woch.* May 1, 1876.

Chronic Purulent Peritonitis cured by Aspiration.—A woman who had been confined in the month of May, 1873, and subsequently suffered from a diffuse puerperal peritonitis, entered the Hôpital Cochin in October of that year. The abdomen was found symmetrically swollen, and everywhere dull on percussion. Aspiration was performed seven times within a period of two months and a half, and seven and a half quarts of pus were withdrawn. The punctures had to be made at different points, because the pus was contained in pockets; after each operation compression was applied to the abdomen. This peritonitis had developed with very little fever and pain, and the general health had continued pretty good.—*Lyon Médical*, June, 1876.

Treatment of Hydrorachis by the Elastic Ligature.—M. Mouchet reported at a recent meeting of the *Société de Chirurgie*, two cases of hydrorachis, in one of which, the tumor, which was situated over the sacrum, was punctured on the day of birth, and an elastic ligature applied to its base. As, however, the ligature became displaced, the section was completed by the knife and sutures were applied. The wound united after some delay, and the cure was complete on the 21st day. In the second case, the tumor was four inches long, by two and a half broad, and was situated in the lumbar region; a ligature was applied without previous puncture, but the child died eight days later from causes that had no connection with the operation. The same operation has been performed six times by other surgeons, and was successful in three cases. In two of these cases, the lesion was situated in the neck, which is a favorable position for it, for the tumor then rarely contains nervous elements. In tumors of the base of the vertebral column, the method of Morton, which consists in injections of fifteen minims to a drachm of the glycerine of iodine, according to the size of the tumor, would be preferable.

In the discussion that followed, several members of the society protested against the operation. M. Blot said that these tumors often disappear spontaneously, and that consequently we should not interfere, except when the walls of the sac are too thin. M. Polaillon thought that the operation should only be undertaken when the tumor is increasing and becoming a deformity. M. Larrey said that he had seen a man, 27 years of age, who had a hydrorachis of the lumbar region, which caused him no inconvenience. M. Guéniot called attention to the fact, that the canal of communication between the tumor and the cord has cartilaginous walls, and may be obliterated in the process of development of the skeleton. M. Depaul opposed the operation, because the tumor almost always contains nervous elements. As regards the cures that have been obtained, there is cause to believe that tumors of the vertebral column have been mistaken for true spina bifida, which is a tumor which comprises the envelopes of the cord.—*Journal de Méd. et de Chir.* June, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, August 26, 1876.

THE INTERNATIONAL MEDICAL CONGRESS.

As the time approaches for the meeting of the International Congress at Philadelphia, the anxiety concerning its success increases. We have no doubt that the gathering will be large, and that the different leading medical societies of the world will be well represented. From all the larger cities of Europe assurances have come signifying the acceptance of invitations, and responsible delegates have been elected. It is fair to presume that the great majority of the foreigners who have already signified their intention to read papers and deliver addresses will be able to keep their appointments, and that the scientific material for discussion will be abundant. In prospecting the interest which will attach itself to this Congress, the profession of this country should recognize the arduous labors of the Committee of Arrangements at Philadelphia in perfecting a plan, which, as far as circumstances would admit, is so well calculated to subserve the interests of all the different medical centres of this and of other countries. In fact, the more we study the programme of arrangements the more are we impressed with the wisdom exercised in the selection of subjects and the judgment displayed in the choice of the speakers.

The time selected for the meeting, all other things being considered, is the one best calculated to meet the conveniences of the larger majority, especially of those who will cross the ocean to be present. The occasion of the meeting, and the special attractions of the Centennial show, will add inducements which few of our foreign brethren, who wish to combine social amusement with professional profit, will care to resist.

The delegates from the different leading societies of this country have been without exception selected with great care, and altogether the coming Congress is destined to be the largest and most influential of its sort that has ever assembled.

It is impossible to predict the mutual influences for good which will be exerted upon native and foreign delegates. Such influences will be more or less powerful in proportion to the existence of an understanding to work individually and collectively for the common good of medicine and the general advancement of scientific knowledge. It will be our aim to prove to our distinguished visitors that we, as a profession, are keenly alive to the necessities of the medical science of the nineteenth century, and that while we in many cases look to them as our teachers, we are not behindhand in original research, and in that love for advancement and the attendant substantial progress which it attains. While we are willing to respect the influences of their labors in the cause of science, we ask, and shall doubtless receive of them, a substantial recognition of services in the same direction.

The assembling, however, of such a large body of influential medical men must have a significance which is independent of these considerations. It should not be viewed as a mere medical society for the discussion of cases and the particular methods of treating diseases, but as a world's Congress brought together for the discussion of general principles in medicine, general laws of disease, general methods of observation and study, and the general influences of climate, altitude, etc. The opportunities for the presentation of views upon these subjects, in view of the wide-spread representation at the Congress, should not be lost to science. We shall probably have men from every part of the globe, who are able and willing to speak on all these subjects in connection with the professional sentiments of their respective countries; men who can contribute to a general fund of experience, which may serve as the starting-points for new and more exact methods of study and of observation. The higher we get in the study of the general principles of our art, the better will we be able to take a more extended review of our resources, and the more effectually can we look over the prejudices of hobbies, of doctrinal perplexities, and of party interests.

The first step in the direction of studying disease after this general plan is to establish some methods of observation which shall be uniform throughout the world, some mathematical language which shall be universally understood. The presentation of this particular idea is not new to the readers of the RECORD, and will remind them of previous efforts on our part to point out its necessity as the real starting-point of medicine as an exact science. What better time and place will be afforded than at the next Medical Congress to agree upon some general plan of action, to make some earnest beginning in the right direction? The way is already prepared by the appointment of a committee whose duty it is to bring the matter before the meeting. One of the members of this committee

is Dr. E. Seguin, of this city, whose special study of this subject entitles his views to respectful consideration. It will hardly avail the Congress to discuss the propositions in all their bearings, as this will consume too much valuable time. All that is expected for the present is the establishment of the principle, and an agreement upon a system which shall make its universal application practicable. The time and opportunity are auspicious, and there is no good reason why the initiative should not be taken at once. The idea is essentially an American one, and should receive its practical endorsement during the Congress held in this country. The necessity for such a system of uniformity of observation can hardly be questioned; in fact it has been practically recognized by the specialists, and its adoption has tended more than anything else to give positiveness to their experience and substantial progress in their departments. All that is necessary is to extend the influences of such a system so that it may have an application to the whole domain of general medicine. Of course it may require years before any plan which may be suggested is universally adopted, but this is the most powerful argument in favor of making a beginning at once. In giving our idea of the scope of the discussions which should be had before an International Medical Congress, we have no intention of reflecting upon any arrangements of the committee who are to conduct the meeting. In fact, the character of their programme is not inconsistent with a very liberal interpretation of our sentiments; and if circumstances will permit of their carrying out the letter and spirit of their plan, the meeting cannot fail to be a brilliant success.

Reviews and Notices of Books.

THE TREATMENT OF SYPHILIS. By J. L. MILTON, Senior Surgeon to the St. John's Hospital for Diseases of the Skin, London. London: R. Hardwicke, 1876.

MR. MILTON has long been recognized as an authority of high standing upon cutaneous and venereal diseases; and works from his pen have been received with much attention, owing to their eminently practical character. This peculiarity, noticeable in all his former works, is especially so in the one under consideration, in which the author gives us, in a handy-volume form, the results of his long study and observation in the treatment of syphilis. Coming from an observer of the undoubted ability of Mr. Milton, the present treatise, which includes the full consideration of the treatment of syphilis, is especially acceptable; as we can be assured of its trustworthy and practical character. It is perhaps known that, within a year or so, Mr. M. published an article remarkable for the lucidity of its directions upon the treatment of secondary syphilis, which attracted considerable attention, as it was in reality a contribution from which much benefit as to practice could be derived. In the work before us, the author discusses, not only the secondary stage of syphilis, but also every possible lesion produced by that disease which the practitioner is liable to meet. From the primary sore to the latest tertiary manifestation, we find every syphilitic affection mentioned with sufficient but short clinical description followed by directions for treatment, which differ in their simplicity and appropriateness from those generally met, which, we are sorry to say, are often of no benefit, as they are not laid down with that precision necessary to therapeutic description. Indeed, amid the mass of literature upon the subject of syphilis, we do not know of so peculiarly practical and acceptable a work as the present one. In no text-book or monograph can the practitioner find the clear systematic handling of the subject of the treatment of syphilis in general as he can here. Within a reasonably small compass, the book consisting of but one hundred and fifty pages, we find the morbid conditions of the disease fully discussed, and the indications for cure admirably laid down. It seems strange to one after reading the work, that such had not appeared before, as its want has long been manifest. The author shows an extensive acquaintance, both clinical and practical, with the protean forms of syphilis; and his disquisitions as to the value of remedies, and to the appropriateness of certain operative procedures, as well as modes of treatment, can be read with interest by the specialist, and with great profit to the general practitioner. It certainly is a matter for congratulation that the author should have found time to give us the benefit, in so admirable a treatise, of the experience he has gained in his *pratique de cabinet*.

Correspondence.

AUTOPLASTY BY GRADUAL APPROACHES,

AS APPLIED TO THE SUCCESSFUL TREATMENT OF URINARY FISTULÆ IN WOMAN, IN THE CLASS OF CASES USUALLY THOUGHT TO BE AMENABLE ONLY TO PARTIAL OR COMPLETE OBLITERATION OF THE VAGINA; BEING A LETTER ADDRESSED TO DR. PAUL BERGER, AGRÉGÉ TO THE FACULTY OF MEDICINE OF PARIS, BY NATHAN BOZEMAN, M.D.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—In the month of November last, Prof Dolbeau submitted to me for treatment at the Hospital Beaujon, three women with four urinary fistulæ, which he said were incurable by the methods ordinarily employed in France.

Case I. presented a somewhat elliptical opening extending from the middle of the urethra to the cervix uteri, measuring longitudinally about five centimetres, and transversely between two and three. Broad cicatricial bands extended across the rectal wall, which effectually prevented movement of the uterus downwards. This case I did not treat.

Case II. had a small transverse urethro-vaginal fistula near the bladder, and at the same height a cicatricial contraction of the entire calibre of the vagina, to the extent of allowing only the point of the index finger to pass. This cicatrix involved both edges of the fistula, was thick and unyielding, thus rendering operative procedure upon the latter impossible. Here by preparatory treatment I secured access to the fistula in less than five weeks, and returned the patient to Prof. Dolbeau for completion of the cure, which he then thought could be effected without difficulty.

Case III. exhibited an urethro-vaginal and an urethro-vesico-vaginal fistula with a narrow bridge of in-

odular tissue intervening, and with almost complete atresia of the entire vaginal tract. In this case I converted both fistulæ into one and dilated the vagina to the extent of four inches in depth and 2½ in width. The fistula then presented an oval form, having its anterior border notched at the urethra, and, to the right of this point, firmly adhered to the pubic bone; it measured transversely 4½ centimetres, and longitudinally about 3¼. Now Prof. Dolbeau, not wishing to undertake the coaptation of the edges of the fistula, requested me to make the operation, which I did on the 17th of March. Firm union was effected at the first trial, excepting only two small points separated by the urethra. The left opening, the size of a No. 6 catheter, was caused by the cutting of the corresponding suture; and the right, the size of an ordinary probe, stood directly in the line of union. Both of these small remaining fistulæ can now be easily united, and the whole closed at a second operation, which Prof. Dolbeau will perform soon.

The principles of treatment employed in the third case has been commented upon at length and in a manner highly appreciative (*La France Médicale*, May 13 and 17) by Dr. Paul Berger, *agrégé* Professor to the Faculty of Medicine of Paris; and to this publication I would respectfully refer all who may feel an interest in the subject. But I may add here that Dr. Berger, in his remarks, has inadvertently made two or three erroneous statements regarding certain important points of practice, which in justice to myself need to be corrected.

For this purpose, and in order to define my position with regard to obliteration of the vagina, as a means of treating vesico-vaginal fistula, I now ask the use of your columns. This I deem essential for a better understanding of the subject, not only as regards the result attained in the case in question, but as a principle of general applicability to the cure of a not inconsiderable class of cases, usually regarded amenable only to tentative expedients.

A fistula, whether small or large, complicated with atresia in any form, is, to use a military expression, the stronghold, to be reached only in two ways, namely by direct attack and by gradual approaches. The first mode, scarcely need I say, was the one adopted by Jobert (de Lamballe), who made various superficial and deep incisions, principally upon the anterior wall of the vagina, for the purpose of freeing the borders of the fistula and gliding the tissues, his object *primarily* being to close the fistula. The procedure he called *Autoplastie par glissement*, and the plan, excepting the detachment of the bladder from the cervix uteri and from the pubic arch, has formed ever since a prominent feature in the practice of almost all surgeons. The second mode I adopted: *first*, for the purpose of freeing the edges of the fistula by incisions upon one or both walls of the vagina, and restoring the organ as near as possible with dilatators to its normal dimensions; and, *secondly*, as a measure of closing the fistula by coaptation of its edges. Now, to continue the analogy in regard to these preparatory and ulterior operations, and for the want of a better designation, I beg leave to call my procedure *Autoplasty by gradual approaches*, a term which seems specially appropriate, since it is readily descriptive of it.

A method which approached nearest in principle to the last-named, was that of Desault; namely, the employment of the tampon. But when it is recollected that Desault only recommended the tampon in cases uncomplicated with atresia, and simply as an obturator of the fistula, analogy of his procedure to it ceases. This procedure, in contradistinction to the other two, may be designated as one of *circumvallation*; and while it did favor the contraction of the largest-sized fistulæ, it was quite insufficient to complete the closure even of the smallest, save in exceptional cases, when associated with the important auxiliary of cauterization.

As to how I was first led, in 1854, to make the combination of repeated incisions and intra-vaginal dilatation with closure of the fistula, it is not necessary to refer in this connection. Suffice it to say that the plan was modified and extended from time to time, and did not reach its highest perfection until 1867. At that time I completed my bivalve self-retaining speculum, founded upon the principle of the parallelogram of forces, which enabled me apply a powerful and regulated force to the whole length of the contracted vaginal walls, and at every stage of the dilatation to discover and surmount even the smallest points of resistance; a thing I had not previously been able to do with the so-called duck-bill speculum in a certain class of cases, where obliteration of the vagina seemed to be the only alternative. To such a category, for example, belonged the third case at the Hospital Beaujon.

The invention about the same time of my *knee-chest support*, which secured the steadiness of the patient, and rendered anæsthesia safe in the anterior position, also contributed no little to the completion of the procedure as a whole.

As to the details of the procedure by gradual approaches, it is unnecessary to go over them here. This point has already been made sufficiently clear for all practical purposes by the able reports of Dr. Berger, and of Dr. Bandl of Vienna (*Wiener Medizinische Wochenschrift*, Dec. 4–11 18 25, 1875).

I will take the liberty in this connection to say, that the manner in which these gentlemen have presented the subject is in very striking contrast with the criticisms in the last-named Journal of January 15th, upon my operations in the General Hospital at Vienna, illustrating the utility of this new principle of treatment. Here the writer seems to have no higher view of the matter than the hackneyed one of sutures, and to entertain the opinion that a woman with a fistula, treated by having *her vagina shut up*, is as well off as another cured by *obliteration of her fistula*.

In Germany and Austria, scarcely need I say, *kolpokleisis*, or obliteration of the vagina in some part of its course, is a very favorite procedure with a large majority, if not all of the leading surgeons, a fact which may account to some extent for the unjust criticisms of the writer referred to.

To give some idea of the extent to which this operation is carried in those countries, I will remark that, during my sojourn there of twelve months, I saw sixteen cases of fistula, principally of the varieties vesico-vaginal and urethro-vesico-vaginal. Out of this number *five* were actually subjected to the operation for obliteration in the urethral portion of the vagina, with the following results: *Two* died on the sixth day after the operation, from phlegmonous inflammation and other complications; *one*, in which a small opening remained, became pregnant subsequently, and at full term ruptured the perinæum and the recto-vaginal wall, and was left with such an increase of the original difficulty as was thought to be beyond the reach of any operative procedure; the *fourth*, a young woman, completely unsexed, was threatened by her husband with abandonment unless she had the obstacle to his marital rights removed; the *fifth*, who had already undergone four or five operations, remained with the vagina at the seat of closure sufficiently patulous to permit the passage of the index finger into the

cul-de-sac above, and into the fistulous opening of about the same size; while *four* others, presenting various complications, were thought to be incurable by any other procedure—making in all nine, 56¾ per cent., with a mortality of two, 12½ per cent.

In justice, however, to Prof. Simon, the inventor of this well-known expedient, it is proper to remark that he resorts to it much less frequently than his numerous followers; who, having less experience and skill than their master, resort to it, where he would consider it unnecessary—a fact of which I became thoroughly convinced from my own personal observations.

Dr. Berger, in his remarks, justly says my procedure is one of *Anaplastie*, and may be divided into two stages. He then enumerates what he conceives to be the advantages and the dangers of it in practice.

First, as to the advantages. I am pleased to say he has rendered these duly prominent, in regard to the restoration of the calibre of the vagina, the freeing of one or both edges of the fistula, and the paring of the latter almost perpendicularly, at the expense of the entire thickness of the vesico-vaginal septum, in contra-distinction to the *broad vaginal denudations* usually described by authors, as a distinguishing feature of the so-called "American method." This last point of practice is not properly appreciated by many operators, and hence the failures which they often meet with, especially in the class of fistulæ with thin borders and surrounding inodular tissue. To these advantages he might have added that recto-vaginal fistulæ are equally amenable to the same plan of treatment, even when they are situated in the posterior cul de-sac, and the way is intercepted by thick and resisting cicatrices—a matter of no little importance, when a vesico-vaginal fistula coexists, and the question of obliteration of the vagina is presented. But the great and overshadowing advantage is the avoidance of obliteration of the vagina, which Dr. Berger has sufficiently indicated, though not strictly in accordance with the range of my experience. Here he does me slight injustice in stating that I believe every case of fistula can be cured by the system of gradual approaches. What I do believe and claim is that, in 90 per cent. of all cases, the fistula can be obliterated and the normal menstrual and sexual functions be preserved; and that of the five per cent. in which this cannot be effected, and obliteration of the vagina seems to be called for, little or no permanent good can result to the sufferer from the latter expedient, however successfully accomplished.

In the latter class of cases, according to my observations, the vagina is reduced to a mass of inodular tissue, somewhat resembling cartilage, complicated with partial or complete destruction of the urethra, or with recto-vaginal fistula, or with laceration of the perineum and the recto-vaginal wall—a condition of the parts rendering continence of the urine only possible in a few cases, and clearly impossible in all the others, to say nothing of the dangers attending the operation itself. I, therefore, insist that it is better in all such cases to leave the outlet of the vagina free for the unobstructed flow of the secretions, and to trust alone to a well-adjusted tampon or compress for the comfort and protection of the patient.

This leaves five per cent. for deaths, a maximum of mortality which, in my experience, I am happy to say, has not yet been reached.

Next with regard to the disadvantages or dangers of *Autoplasty by gradual approaches*. Of these Dr. Berger mentions rupture of the peritoneum, rupture of the bowel, and phlegmonous inflammation. Now I think I am justified in saying that Dr. B. has invested all these accidents with an undue importance, both in his review of Dr. Bandl's memoir (*Revue des Sciences Médicales*, April 15, 1876), and in his remarks now under consideration, as will appear by reference to the following facts bearing upon these points.

The word *rupture* conveys to my mind the idea of unwarranted violence; and consequently is to be regarded as a somewhat unavoidable accident, liable to occur in any and all cases without the greatest care; whereas the reverse of this is true, excepting care and prudence, which of course are to be observed by the surgeon under all circumstances. Of the case referred to in the Hospital at Vienna in which a small opening in the peritoneal cavity was made, the accident was unexpected, it is true; but fortunately it terminated without serious consequences; and the patient was cured, with unimpaired menstrual and sexual functions, a result thought by competent surgeons to be quite out of reach by the ordinary resources. Here there was a cicatricial band, which stretched across the vagina just under the posterior lip of the cervix uteri, which prevented the necessary depression of the uterus for closure of the fistula. The latter was principally situated to the right of the median line, and had its anterior border fixed to the posterior surface of the pubic bone—a condition of the parts very rarely seen, and just such as is supposed to furnish the indications for oblique obliteration of the vagina. This band, after having been put upon a slight stretch with my speculum, was carefully incised to the left of the median line. It showed no signs of yielding under the knife and pressure of the finger, until complete division had been effected, when it gave way, and with it the subjacent peritoneal covering. I had often before made divisions of cicatrices in the same locality and seen them yield by the same practice, and there was no obvious reason why such a result would not follow without accident in this instance. A single accident, however, of this kind in an experience of nearly a quarter of a century cannot, I think, be regarded in a very serious light, especially when the character of the fistula, the principle of the operation, and the final result are considered.

But this experience is not without value. In future I shall content myself in such cases with making two or three superficial incisions across the resisting band, and then trusting to dilatation. By pursuing this course, only a little more time will be required to accomplish the same end.

As to rupture of the bowel, I can only say that I have not yet encountered such an accident. In one instance, I purposely opened the rectum in order to reach the required dilatation of the vagina, and to place healthy tissue between the two ends of the divided cicatrix, with the ulterior object of relieving the neck of the bladder, also encircled by a cicatricial band, and the seat of an urethro-vesico-vaginal fistula. Both fistulæ in this case were closed, each at one operation, and a most excellent result secured.

I may say there is a certain form of vaginal atresia resulting from other causes than those of parturition, in which the above practice is not only justifiable but preferable, in order to save time and secure the best results. An illustrative case of this character I saw in the Hospital at Vienna, in the service of Prof. Carl von Braun.

Phlegmonous inflammation, Dr. Berger says, is to be apprehended from incisions and lacerations of inodular tissue. His reasons for this belief are entirely apropos, and would seem to have some foundation in fact, but my clinical experience does not justify such a conclusion. When it is recollected that, in the treatment by gradual approaches, a free outlet for the vesi-

cal, vaginal and uterine secretions is maintained, and that the greatest possible cleanliness is observed, the truth of my assertion will be obvious. With these precautions and the daily application of a solution of nitrate of silver to the exposed vaginal wounds, coupled with judicious pressure of the dilator, the dreaded danger referred to ceases in a great measure to be a factor in the relationship of cause and effect. It is this, I conceive, that places the principle of *autoplasty by gradual approaches* in so favorable a contrast with that of obliteration of the vagina, or kolpokleisis. In the latter procedure, the extensive denudations required upon the two vaginal walls, perhaps already in a somewhat morbid condition, are more or less exposed, in and above the seat of operation, to the poisonous action of decomposed blood, pus, and urine, which can only find an outlet through the narrow urethra—a condition of things eminently conducive, it must be admitted, not only to phlegmonous inflammation, but to pyæmia.

In support of what is above stated, in contravention to the alleged dangers of my procedure, I may say that I have, out of more than one hundred of all classes of cases, lost but three—one in 1858, in the Royal Infirmary at Edinburgh, and two in 1861, in my private hospital in New Orleans. The *first* was a woman with complete incarceration of the cervix uteri in the bladder, and in a bad state of health superinduced by alcoholism and other effects of irregular and vicious habits. In this case the object of the operation was to restore the os uteri to its position in the vagina, and at the same time obliterate the fistula. Both of these ends were obtained most satisfactorily; but unfortunately, phlegmonous inflammation supervened, which terminated in pyæmia and death on the sixth day. The *second* case, having a small uncomplicated vesico-vaginal fistula, died on the fifth day of the operation, it is believed from septicæmia, induced by infection of the hospital from a case of erysipelas. Two other cases in the same ward which had been operated upon, one for laceration of the perinæum six days before, and the other for hypertrophy of the cervix uteri two weeks, died almost on the same day, having identical symptoms, thus showing that death in the case of fistula was due to a cause other than that of the operation. In the *third* case, the patient whose health was somewhat impaired, and who had a small fistula complicated with partial atresia, died on the fourth day after lateral incisions were made. Here, from the smallness of the incisions, the comparatively little inflammation which followed, and the similarity of some of the symptoms to those of the above cases, there is reason to believe that the poisoned condition of the hospital played a most important part in producing the fatal result, although several months had intervened, and every precaution had been taken as to cleanliness and disinfection.

Now, as to the closure of the fistula and the best means of doing it. These points, although totally disregarded in the first stage of *autoplasty by gradual approaches*, are nevertheless of paramount importance as regards the final result; and cannot be passed over, as is too often the case, by the mere assertion that one method is as good as another. They acquire, I conceive, additional interest at this juncture, from the fact that many surgeons in France, Belgium, and Italy have faltered in their support of the suture, including the much-vaunted American method; and now strongly advocate, even in simple and uncomplicated cases of fistula, a return to the old methods of cauterization, and of hooks or claws, as employed by Naegele, Lallemand, Laugier and others, designating the latter as the *méthode par réparation immédiate secondaire*.

Professor Amabile, of the Royal University of Naples, has had the kindness to send me a most interesting brochure upon this subject (*Discours prononcé au congrès des sciences médicales de Bruxelles*, 23 Sept., 1875). With regard to the suture, he says: "The treatment of vesico-vaginal fistula by means of paring and suture, notwithstanding it has given splendid results and been earnestly extolled in our day, has never popularized itself among surgeons, and rests at present in the hands of only a few operators. Often in a country only one or two surgeons employ it. Distinguished operators, wishing to try it, have often given it up after their first failure. Again, patients, when fully impressed with the gravity of their disease, often cannot make up their minds to submit to a repetition of this mode of treatment, because it is, if not very painful and dangerous, always laborious, long and tedious for everybody—the surgeon and assistants even more than the patients themselves."

Now, with the acknowledged superiority of the suture to the above old methods, even by the class of surgeons in the countries named, it is easy to see why this lukewarmness in its support has sprung up. It can be referred to no other cause, as I believe, than want of success; resulting in a great measure, *first*, from inattention to the morbid conditions of the vagina, other than that of the fistula itself; *secondly*, from the employment of too broad or flat surfaces in the paring of the edges of the fistula; and *thirdly*, from the adoption of the dorsal or lateral position of the patient.

The three forms of suture best adapted to the closure of the fistula are unquestionably the simple wire interrupted, the double silk interrupted, and the button wire interrupted, which I name in the order of their first adoption. The first and the second forms are now most generally employed by surgeons, under the belief that they are more simple, and quite as efficient as the last mentioned.

Now, without stopping to discuss the subject, I will simply say, that while the above convictions may be correct as to uncomplicated cases of fistula, they cannot be accepted as such with regard to efficiency in the second stage of *autoplasty by gradual approaches*, where it is all-important that success should be secured at the first application. Here something more than the simple or double suture is needed, in order to counteract the tendency of the vagina to recontract and to hold the edges of the fistula quietly in their extended relationship, while the healing process is going on. This is no less essential, I conceive, than the application of splints or the immovable apparatus, to keep the ends of a broken bone in a state of perfect quietude. The tendency of the vagina to recontract is not characteristic, it is true, of all cases of atresia, but there are many in which it does exist; as, for example, when the cicatrices upon both walls are extensive, and have not been completely mobilized, a condition of the parts which actually did present itself in the last case treated at the hospital, Beaujon. Here the vagina recontracted from 65 to 50 millimetres in twelve days, thus showing the extraordinary strain to which any unaided form of interrupted suture would have been subjected in holding the edges of the fistula together in the centre, where the retraction is always greatest.

Any suture, therefore, which counteracts this tendency of the edges of the fistula, during the healing process, to change their relationship, will succeed oftenest at the first application. Hence it is my honest belief, that there is no form of suture which will fulfil these indications so completely as the button wire inter-

rupted. Without it, I insist that it is quite impossible for any surgeon, however skilful he may be in the treatment of the *first* stage of *autoplasty by gradual approaches*, to ever succeed to any considerable extent in the *second*—the obliteration of the fistula; because a repetition of operations in this latter stage is not only demoralizing to the patient but to the surgeon himself, and must in the majority of cases result in disastrous failure.

But be this as it may, let the surgeon in all cases make thorough work of the first stage of the treatment; for, in the same proportion as he succeeds in that regard, will he increase his chances of success in the second, whether the simple, the double, or the button interrupted suture be employed. As for my part, I always use the third form—the *button suture*; and my convictions of its superiority to the other two for the reasons given are thorough, being the result of long experience and fair trials with the best operators of my country in the same cases and upon the same fistulæ.

Now to show the favor in which *autoplasty by gradual approaches* is held in Austria, where it has been subjected to the severest test, I may be pardoned for adding here a short extract from a manuscript letter of June 15th, addressed to me by Dr. Ludwig Bandl, of Vienna, assistant of Prof. Carl von Braun. He says: "It will no doubt please you to hear that, ever since the publication of my article upon your method of treating vesico-vaginal fistula (op. cit.) cases have continued to pour into our clinic. We have at present twelve under treatment; the greater part of which being of the most difficult character, I have myself, by permission of Prof. Braun, already operated upon two. My first case presenting a large fistula, and being otherwise difficult, I cured at two operations. My second case, thought by Prof B. to be incurable, I have operated upon twice. In the first operation I had to use a button of angular form and bent upon its axis, with nine sutures. The result was a closure of about four-fifths of the fistula. In the second operation I used four sutures and a suitable button, and reduced the size of the fistula to that of a surgeon's probe. I hope to complete the cure at another operation. My third case I expect to operate upon in a few days. Here the fistula is very large, being of a T shape. Only 1¼ ctm. of the outer portion of the urethra remains. The upper border of the fistula, after two months' preparatory treatment, has been made quite as movable as it was in your fourth case operated upon here. I hope to close the greater part of the fistula at the first operation.

"Prof. Simon recognizes the advantages of your procedure, and will soon publish an article upon the subject in the *Wiener Medizinischen Wochenschrift*, with illustrations. I hope by that time to have four cured cases to report."

NATHAN BOZEMAN, M.D.

22 RUE LAVOISIER, PARIS.
July 20th, 1876.

COOL BATHING IN THE TREATMENT OF INFLAMMATORY BOWEL AFFECTIONS OF CHILDREN DURING THE SUMMER.

TO THE EDITOR OF THE MEDICAL RECORD.

DEAR SIR:—In a letter from Dr. C. G. Comegys, of Cincinnati, Ohio, to the RECORD of July 29th, 1876, "cool bathing in the treatment of inflammatory bowel affections of children in the summer season, where fever is present," is earnestly recommended. I desire to add my testimony, based upon an experience of seven years in the practice of diseases of children, to the value of this suggestion of Dr. Comegys, as I have found *no* treatment so uniformly successful as the systematic abstraction of heat in the above class of cases. Indeed, I may venture the assertion that in a great majority of cases of entero-colitis or gastro-enteritis, attended by fever, occurring at or subsequent to dentition, antipyretic treatment, the most effective part of which being cool bathing, offers the only hope of cure. As is stated by Dr. Comegys, when we are called to these cases we find that the whole attention of the friends, and it may be the attending physician, has been oftener than otherwise, directed to the control of the diarrhœa, which is, no doubt, thought to be the sole cause of the symptoms. My experience has been, that it is utterly impossible to control the vitiated and excessive discharges from the bowels so long as fever exists, which in *every* case does not correspond with the inflammatory action in the bowels, as determined by the physical signs, and hence cannot, pathologically speaking, be considered as the constitutional expression of such inflammation. Practically considered, *it is essential that hyperpyrexia be regarded as the pathology of these affections.*

The symptoms have been well described by Dr. Comegys. In some of my cases the congestion of the bowels (which is but a part of the general condition of the circulation) has been so intense as to result in evacuations of pure blood. And it is surprising how much of this can be passed by the little patient without proving fatal. Other cases presented regular dysenteric symptoms. Without paying attention to the diarrhœa beyond giving small and repeated doses of castor-oil in emulsion with laudanum, and keeping applied tepid poultices over the abdomen while the patient is out of the bath, I have addressed my efforts strictly to the *reduction of fever*, and have found the bowel symptoms subside, *pari passu*, with the decline of temperature. If, however, diarrhœa should persist after the fever has gone, it can *now* be easily controlled by simple astringents and injections.

My plan of using the bath is not essentially different from that followed by Dr. Comegys. I am careful to, if possible, superintend the bathing myself. When unable to do this in severe cases, unless an intelligent nurse can be had, which is seldom the case, I have little hope for the patient.

A table, only sufficiently large to accommodate comfortably the body of the patient, is provided, and on this is spread first a double blanket, next a quilt, and over these a sheet is drawn and a small *hard* pillow placed at one end on which to lay the patient's head. All clothing is now removed from the body of the child, which is immediately immersed up to halfway the chest in water whose temperature is about ninety-five degrees. A cold wet cloth is then placed upon the head, which is supported by the hands, and the water of the bath, constantly poured out of small pitchers by assistants over the shoulders, back, and thorax of the patient. Cold water is gradually added and stirred into the bath, until the temperature of the latter has been lowered to seventy or perhaps sixty-five degrees, the strength of the child and the height of the fever determining the lowest point to which the cold can be carried with safety to the patient and benefit to the symptoms. When the temperature of the bath has been reduced to eighty or seventy-five degrees, the cold cloth is removed from the head, upon which, as well as the upper part of the body, the water is now poured, and this treatment is continued for fifteen or twenty minutes, when the temperature,

which in severe cases reaches 105 or more, will generally be found to have lowered to 100 or 101, perhaps less. The child is now lifted unwiped upon the table, covered with a sheet and one or two thicknesses of a light blanket, and immediately given a few teaspoonfuls of good brandy toddy (cooled with ice), which latter is systematically repeated every two or three hours, notwithstanding the high temperature, during the progress of the case. Cool ice-water is moderately allowed to slack the intense thirst and dryness of mouth which almost invariably exists.

My habit is to repeat the bath whenever the temperature has increased to 102½° or 103°, which will be found to be the case at the end of three hours in the beginning of the treatment, the intervals getting longer of course as the patient improves.

I have sometimes seen the temperature 101° when the child was placed upon the table, continue to diminish afterward until almost a fatal lowering appeared imminent. This condition is successfully treated by placing bottles of hot water around the patient, applying frictions to the extremities, and administering stimulants, these measures being suspended when the normal temperature is attained.

An important auxiliary to this treatment, but by no means essential to its success, is the administration every morning, while fever persists, of one or two decided doses of quinine. In my judgment it is not only unnecessary and (so far as reduction of fever is concerned) useless, but perhaps injurious to the nervous system of the child, to give the quinine in frequently repeated doses during the day and night. "The cause of fever is overcome by quinine most easily when its activity is lowest," which, in enterocolitis with fever (as in the fevers generally) is shown by the thermometer to be the case in the early morning. Advantage is taken, therefore, of this period to accomplish all that can be done by the use of quinine in the treatment of these cases.

Convulsions, which are but explosions of nerve force excited by the heated blood circulating around and through the nerve centres, are best controlled by the bath and by the bromide of potassium with sweet spirits of nitre in camphor mixture; while the exhaustion of the vital forces which results is avoided as far as possible by the timely administration of beef-tea, milk, and stimulants.

The above plan of treating a class of cases, by no means rare or usually satisfactorily managed, to be successful *requires much time and great diligence and perseverance* on the part of the practitioner, who is encouraged to persist in his efforts by the knowledge, that in all probability they will be rewarded by the recovery of his patient, and if not (in my opinion) he may console himself with the reflection that he has faithfully used the only philosophic means of cure.

Very truly yours,

HENRY K. LEAKE, M.D.

DALLAS, TEXAS, Aug. 4th, 1876.

FLUID EXTRACT OF ERGOT IN DIARRHŒA.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—Having had marked success with fluid ext. ergot in the treatment of diarrhœas, I have thought it well to publish the results of my cases in the hope that others may give it a more extended trial than my limited facilities have enabled me to do.

I have based my use of this drug on the theory that it causes a contraction of the involuntary muscular fibres, and in so doing relieves the atony of the vessels of the intestinal mucous membrane and the consequent hyperæmia of the capillaries (which is always associated with diarrhœas), and thus prevents the transudation of the watery portions of the blood. In other words, it gives *tone* to the vascular walls. Be the theory worth what it may, the success attending its use has been marked. I first tried it (in my clinic at the Dispensary of the Cincinnati Hospital) in the case of a patient with chronic diarrhœa of two years' standing. No line of treatment had been able to reduce the number of his stools to less than eight per day. All other treatment was stopped, and he was given forty drops of the ergot four times a day. He came back four days afterwards saying that he was only having two stools per day, and when he next reported (ten days afterwards) he said that he has been entirely well for the past eight days. I heard from him three months afterwards, and he had had no return of his diarrhœa. He used the ergot six days.

I used it frequently after that in ordinary simple diarrhœas (giving no other medicine), and found that the patients seldom required beyond three doses (twenty drops each), and never more than six.

While stationed at Fort Wadsworth, N. Y. Harbor, last summer, I used it in twelve cases (the number of stools varying from eight to twenty in the twenty-four hours), and in but one case was I obliged to give more than three doses to each case. In that one case it failed to modify the diarrhœa, but that may be accounted for by the fact that the ergot had been kept on hand for a long time.

Since I have been stationed at this post I have had but three chance to try it. In one case it failed (case of chronic diarrhœa of four years' standing); in the second one my patient refused to take more than one dose on account of its unpleasant taste; in the third case it succeeded.

I offer this with the hope that others may give it a more extended trial than I have been able to do, and that they may publish their results.

E. T. COMEGYS, A.M.,
Ass't. Surg. U. S. A.

FORT DUNCAN, TEXAS.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from August 13th to August 19th, 1876.

HAPPERSETT, J. C. G., Surgeon. Assigned to duty as Post Surgeon at Fort Hamilton, N. Y. H. S. O. 157, Mil. Div. of the Atlantic, Aug. 16, 1876.

DE HANNE, J. V., Asst. Surgeon. Leave of absence extended for 20 days. S. O. 158, Mil. Div. of the Atlantic, Aug. 17, 1876.

PRICE, C. E., Asst. Surgeon. To accompany battalion of 4th Artillery to Cheyenne, Wyo. T. S. O. 111, Mil. Div. of the Pacific, Aug. 11, 1876.

HOUSE DRAINS IN OLD LONDON.—The *Lancet* says: We believe there is no exaggeration in saying that the house drainage of nearly two-thirds of houses in the older London parishes is defective. The drains originally constructed of brick, through age and the undermining activity of rats have become extensively pervious, and the domestic sewage passes out freely into the basements, and but a small portion reaches the sewers.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending August 19, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Aug. 12.....	0	14	16	3	2	32	1
" 19.....	0	17	14	2	2	29	3

A Useful Diuretic.—A French surgeon in Algeria has been very successful in the use of the *Juncus Acutus* as a diuretic. About twenty stems are subjected to decoction, both the white and green parts being used.

Plasma Tubes of the Human Skin.—Axel Key and Gustave Retzius give a brief statement of the results of their researches on the plasma passages of the skin, especially of the superior extremities. A more complete account of their studies will be found in their work, now passing through the press, "On the Anatomy of the Nervous System and the Connective Tissue." They mention the fact that, besides the true efferent lymphatic vessels, they have discovered in the skin an extended system of large plasma passages communicating with the lymphatic vessels mentioned, and resembling those which they have mentioned and drawn in the last fasciculus of their work, as existing in the mucous membrane of the nose. In the deepest parts of the skin, the plasma passages around the constituent parts (sweat-glands, hair-bulbs, etc.), are relatively large and wide; in the external portions they become more slender but abundant, and they form a fine net-work in the papillæ. They are not limited by the epidermis, however, but cross the papillæ in many places and penetrate into the rête Malpighii. Our authors have, in fact, succeeded in injecting in the rête Malpighii a fine net-work of plasma tubes with compact meshes which fill the intervals between the various cellules in every direction as far as the corneous layer. The intercellular injection is arrested externally by the latter cell layer; but there is a system of passages at the surface of the skin which are so disposed that the injection penetrates the excretory ducts of the sudoriparous glands. With regard to the plasma passages of the rête Malpighii, our authors remark that M. Bizzozero endeavored, several years ago, to prove that the spines of the cells of the rête do not cross each other like the teeth of two wheels, but that these "stachels and riffs" from adjacent cells hang together by their points, leaving small spaces and passages between them. It is quite evident that it is these intervals which K. & R. have injected in the rête Malpighii, and which communicate with the plasma tubes of the dermis itself.—*Nordiskt Med. Arkiv.* Vol. 8, No. 5.

Contributions to the Neurology of the Epidermis.—Dr. J. G. Ditlersen has found in the skin of frogs numerous fasciculi of vertical fibres, called perforating, starting from the subcutaneous cellular tissue, which is rich in nervous plexuses, and traversing the entire dermis as far as its superior limits. These fasciculi contain nerves, connective tissue and often fibre cells. The nerves, which are surrounded by a sheath of connective tissue, leave the latter at the upper margin of the corium and advance into the epidermis under the form of a compact fasciculus of fibres, provided with nuclei, but deprived of medulla. The bundle crosses the entire epidermis as far as the corneous layer, where it appears to attach itself in an infundibuliform depression. By means of a higher magnifying power (for example, Hartnack, Obj. viii.) one sees that each nerve fibre, after its entrance into the epidermis, bends somewhat in the form of a Roman S outwards and upwards, before terminating in a terminal cell. The most external fibres of the fasciculi terminate in their respective nerve cells as soon as they have entered the epidermis, the intermediate fibres in the middle layers of the epidermis, and the central fibres after having arrived at the two layers of the corneous cells. It should be remembered that the epidermis of the frog is composed of about six or eight layers; the inferior ones are formed by vertically elongated cells, the intermediate layers by round or transversely elongated cells, and the superior layers, that is, the two corneous layers, by flat cells. If it is also remembered that the terminal nervous cells of the different layers of the epidermis, resemble very much in form and aspect the proper cells of the epidermis, we shall be less astonished that the remarkable arrangement above described has remained unperceived up to the present time. In fact, the peripheral terminal cells, that is, those which are situated nearest the corium, stand over the latter in an almost vertical manner, and are spear or chisel shaped. The middle ones are more curved outwards and are larger and leaf shaped. The most superficial cells leave the nerve fibres at an obtuse or almost right angle; like the surrounding corneous cells, the borders of which they touch, they are very flat. The terminal end of the nerve cylinder thus formed does not become attached to the inferior surface of the corneous layer, as appears with a lower magnifying power, but traverses the latter as far as the free surface of the epidermis. In horizontal sections of the epidermis, the transverse sections of the cylindrical fasciculi of the nerve cells appear as large circles filled with irregular sections of terminate cells. In sections of semi-macerated preparations, the ordinary cells of the epidermis may be removed by means of a brush, when the nerve cells will be seen attached to their respective nerve fibres. One may then, with a certainty which leaves nothing to be decided, follow the communication between the cells and the nerve fibres, and the latter may be traced down into the deep layers of the corium. These structures are disseminated throughout the entire skin of the animal; they are more highly developed and in greater numbers in the dorsal region. Undoubtedly they form the organs of sensation of the skin.—*Nordiskt Med. Arkiv.* Bd. 8, No. 4.

Plague and Ague.—A physician of Bagdad states, that in the first stage of the plague it is impossible to distinguish it from ague. Only when buboes appear, which is a characteristic of the former disease, can a diagnosis be made. Quinine has no effect upon the plague; in fact, in the latter stages, it is believed to be positively harmful.

Ventilation of the House of Congress.—The Board to whom was referred the question of Improved Ventilation in the House, has recommended that an increased amount of air be supplied by cutting a number of openings in the floor and inserting extra registers.

Original Communications.

SOME REMARKS UPON THE RELATIONS BETWEEN ANOMALOUS REFRACTION OF THE EYES AND CERTAIN FUNCTIONAL NERVOUS DISEASES,

WITH A TABLE SHOWING THE REFRACTIVE CONDITION OF THE EYES IN FIFTY-FOUR CASES OF EPILEPSY.

By GEO. T. STEVENS, M.D.,

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In a paper on Chorea, read before the New York Academy of Medicine, June 15, 1876, I announced the proposition that not only was chorea the result of anomalous refraction of the eye, but that, beyond any and all other causes combined, other functional nervous diseases are dependent upon refractive lesions.

It will be conceded that there is a large class of persons who are *predisposed* to neuroses of various forms, and in whom comparatively trifling immediate causes give rise to intense neuralgia, to headaches, to hysteria, or to some other form of functional nervous disturbance.

The condition observed in this class of persons has been called the *neuropathic predisposition*; a predisposition clearly of great interest and importance, but of which nothing beyond its existence has been known. No one has ever shown in what the anomaly consists.

It was my purpose, in the paper on chorea referred to, to show that in that form of nervous disturbance so clearly defined, refractive lesions constitute the predisposition to the disease, as they often do the immediate cause, and at the same time I assumed the broader ground that these same refractive lesions are the prevailing cause of neuroses.

This view may perhaps be better expressed by saying that, almost universally, refractive lesions constitute the *neuropathic predisposition*, and that to the refractive condition of the eye we must, as a rule, refer the tendency to the development of functional nervous diseases.

I have now examined a very considerable number of cases belonging to this class of diseases, with reference to the relations between them and the refractive conditions of the eye, and find thus far extremely rare exceptions to the principle above stated.

Thus, in more than one hundred cases of severe recurring headaches, including several which were clearly of the form called migraine, refractive anomalies have been found without exception; in more than seventy cases of chorea the rule holds good, and in seventy cases of epilepsy only three were free from refractive lesions, and in two of these deep physiological excavation of the optic nerve existed, a condition which often gives rise to a most troublesome form of asthenopia. Of numerous cases of hysteria and of neuralgia not of traumatic origin, all possess refractive errors, and the same may be said of many less defined forms of functional nervous disturbances.

In the table below will be found the refractive condition in fifty-four cases of epileptic insane persons. Numbers 1 to 49 inclusive were inmates of the Willard Asylum for the Insane, and I am indebted to the courtesy of Dr. Chapin, the superintendent, and of his able assistants, Drs. Wise, Nellis, Carson, and Hopkins, not only for the opportunity to examine these cases, but for their great kindness in affording every facility for making what, under the circumstances, was a difficult series of examinations.

The cases numbers 49 to 54 were inmates of the Marshall Infirmary of Troy, and my thanks are due to Dr. Lomax, the superintendent, for his kindness and assistance.

Several of my medical friends have referred cases of epilepsy in their private practice to me for examination of their eyes. Some of these are now under observation, and the results of the correction of the refractive evils will be duly reported.

The results given in the table are necessarily, under the circumstances, in some cases less technically exact than an ophthalmic surgeon would expect to obtain with his private patients at his office, yet they are materially correct.

In most cases one eye was atropized, and when the refraction was determined solely by the ophthalmoscope—as it was necessary to do when the intelligence of the patient was not sufficient to enable him to answer questions correctly, or at all—the eye examined was fully under the influence of atropine.

In many of these cases the optic disk and retina exhibited a noticeable degree of hyperæmia, a condition to which considerable importance has been attached in cases of insanity, but which I believe to be only the hyperæmia which the ophthalmic surgeon habitually finds in his cases of astigmatism and hypermetropia. The amount of sight was recorded after correcting the refractive errors. It will be observed that in only a small proportion of the cases is the amount of sight more than $\frac{20}{30}$.

(Explanation of symbols: H., hypermetropia; M., myopia; Ah., hypermetropic astigmatism; Am., myopic astigmatism; H. Ah., hypermetropia with hypermetropic astigmatism, etc.)

TABLE

SHOWING THE REFRACTIVE CONDITION OF THE EYES IN FIFTY-FOUR CASES OF EPILEPTIC INSANE PERSONS.

No.	Name.	Age.	Sex.	Duration of Epilepsy.	Form of Insanity.	Amount of Sight.	Refractive Condition of Right Eye.	Refractive Condition of Left Eye.	REMARKS.
1	H. L.	34	F	18 y'rs.	Mania	$\frac{20}{30}$	Am. $\frac{1}{10}$	Am. $\frac{1}{10}$	Had convulsion two hours before examination. Optic disks hyperæmic. Central veins pulsate strongly, even to small branches. Crescent on temporal side of disk.
2	H. B.	38	F	15 "	Dementia	....	H. $\frac{1}{10}$	....	Ophthalmoscopic appearance normal.
3	C. D.	36	F	....	Parox. Mania	....	M. $\frac{1}{10}$	M. $\frac{1}{10}$	Strong pulsation of central veins. Deep central excavation of optic disk.

TABLE SHOWING THE REFRACTIVE CONDITION OF THE EYES IN FIFTY-FOUR CASES OF EPILEPTIC INSANE PERSONS.—*Continued.*

No.	Name.	Age.	Sex.	Duration of Epilepsy.	Form of Insanity.	Amount of Sight.	Refractive Condition of Right Eye.	Left Eye.	REMARKS.
4	F. H.	13	F	7 y'rs.	Parox. Mania	$\frac{20}{30}$	Normal	M. $\frac{1}{24}$	There is a very deep excavation of the left optic disk, and at the upper border of this excavation is seen a floating membrane one-half as long as the diameter of the disk, and as deep as long. It moves in the vitreous with each motion of the eye. Central veins pulsate very strongly.
5	L. S.	25	F	7 "	Dementia	$\frac{20}{20}$	H. $\frac{1}{20}$	....	
6	L. L.	25	F	....	Dementia	$\frac{20}{40}$	H. $\frac{1}{20}$	....	Hyperæmia of disk, etc.
7	P. N.	26	F	16 y'rs.	Dementia	....	H. $\frac{1}{20}$	....	Patient cannot read, and is so demented as to answer few questions correctly. The refraction determined by ophthalmoscope.
8	E. M.	26	F	21 "	Dementia	....	H. $\frac{1}{14}$	....	Profound dementia. Refraction determined by ophthalmoscope only.
9	M. McC.	39	F	21 "	Dementia	$\frac{20}{30}$	H. $\frac{1}{24}$	....	Has also astigmatism, degree not determined. Hyperæmia of retina.
10	S. B.	22	F	8 "	Parox. Mania	$\frac{20}{30}$	H. $\frac{1}{24}$	....	Disks and retina normal.
11	E. H.	28	F	2½ "	Dementia	$\frac{20}{40}$	H. $\frac{1}{15}$+Ah.$\frac{1}{36}$	....	Ophthalmoscopic app. normal.
12	E. K.	41	F	16 "	Chr. Mania	....	H. $\frac{1}{20}$	....	Refraction determined by ophthalmoscope only.
13	J. H.	39	F	14 "	Chr. Mania	....	M. $\frac{1}{4}$	M. $\frac{1}{6}$	Hyperæmia of retina.
14	E. F.	39	F	Sev."	Dementia	$\frac{20}{40}$	H. $\frac{1}{15}$	....	Has a pair of +18 glasses, which she uses habitually.
15	J. F. C.	56	M	18 "	Parox. Mania	$\frac{20}{40}$	M.$\frac{1}{6}$+Am.$\frac{1}{36}$	Same	Is wearing −10 glasses. Sight is greatly improved by glasses S−$\frac{1}{6}$⌒−$\frac{1}{36}$c.
16	W. T. S.	46	M	12 "	Parox. Mania	$\frac{20}{20}$	Normal	Normal	There is a very deep excavation of the optic disk in each eye, deeper in right than in left. Very strong pulsations of central veins. Marked hyperæmia of disk and surroundings.
17	M. T. P.	27	M	M'y "	Parox. Mania	$\frac{20}{30}$	.....	M. $\frac{1}{24}$	Right eye highly amblyopic. Atrophy of optic disk. Left, deep excavation of optic disk, and strong venous pulsation.
18	D. D.	23	M	" "	Dementia	$\frac{20}{30}$	H. $\frac{1}{30}$	H. $\frac{1}{30}$	Disks, etc., natural.
19	D. F.	39	M	" "	Parox. Mania	$\frac{20}{40}$?	H. $\frac{1}{30}$	H. $\frac{1}{30}$	Not sufficiently intelligent to answer questions well.
20	P. J.	47	..	" "	Dementia	$\frac{20}{30}$	H. $\frac{1}{30}$	H. $\frac{1}{30}$	
21	J. M.	38	M	....	Parox. Mania	Imperfect	H. $\frac{1}{24}$	H. $\frac{1}{24}$	
22	J. McC.	27	M	....	Dementia	....	H. $\frac{1}{17}$	H. $\frac{1}{17}$	Not able to answer questions intelligently. Refraction determined by ophthalmoscope alone
23	P. B.	42	M	13 y'rs.	Parox. Mania	Imperfect	H. $\frac{1}{36}$	H. $\frac{1}{36}$	
24	G. G.	49	M	Sev."	Parox. Mania	...	H. $\frac{1}{30}$	M. $\frac{1}{30}$	
25	J. E. M.	19	M	2 "	Parox. Mania	$\frac{20}{20}$	Am. $\frac{1}{36}$	Am. $\frac{1}{36}$	Crescents at inner and outer side of each disk.
26	H. K.	32	M	20 "	Parox. Mania	$\frac{20}{20}$	Ah. $\frac{1}{36}$	Ah. $\frac{1}{36}$	Deep excavation of optic disk. Central veins full and pulsating.
27	J. C.	31	M	6 "	Parox. Mania	....	M. $\frac{1}{30}$	M. $\frac{1}{30}$	Appearance of disk indicates astigmatism, but owing to the demented condition of patient its degree is not determined. Strong pulsation of central vein.
28	W. B.	47	M	4 "	Parox. Mania	....	H. $\frac{1}{15}$	H. $\frac{1}{15}$	
29	H. L. M.	41	M	Sev."	Parox. Mania	$\frac{20}{30}$	H. $\frac{1}{30}$	H. $\frac{1}{30}$	Sight without glasses $\frac{20}{40}$, with +30 glasses $\frac{20}{30}$.
30	E. H. W.	27	M	" "	Parox. Mania	....	M. $\frac{1}{20}$	....	Left eye not examined.
31	G. W.	21	M	15 "	Parox. Mania	....	H. $\frac{1}{20}$ Ah.−	H.$\frac{1}{20}$ Ah.	Has high degree of astigmatism, but is too refractory to allow of an accurate determination.
32	P. M.	44	M	M'y "	Parox. Mania	$\frac{23}{30}$	H. $\frac{1}{20}$]	H. $\frac{1}{20}$	

TABLE SHOWING THE REFRACTIVE CONDITION OF THE EYES IN FIFTY-FOUR CASES OF EPILEPTIC INSANE PERSONS.—*Continued.*

No.	Name.	Age.	Sex.	Duration of Epilepsy.	Form of Insanity.	Amount of Sight.	Refractive Condition of Right Eye.	Refractive Condition of Left Eye.	REMARKS.
33	W. R.	18	M	Sev.y's.	Parox. Mania	$\frac{20}{40}$	Am. $\frac{1}{40}$	Ah. $\frac{1}{40}$	This examination, although not fully satisfactory in respect to the degrees of astigmatism, is sufficiently so to demonstrate the presence of astigmatism and unequal refraction of the two eyes.
34	J. K.	21	M	" "	Dementia	....	H. $\frac{1}{40}$ Ah.	H. $\frac{1}{40}$ Ah.	Degree of astigmatism not determined. On the nasal and temporal side of each optic disk is a broad crescent.
35	W. C.	21	M	17 "	Dementia	....	H. $\frac{1}{7}$	H. $\frac{1}{7}$	
36	L. S.	42	M	M'y "	Dementia	....	H. $\frac{1}{20}$	H. $\frac{1}{20}$	
37	W. F.	33	M	" "	Dementia	....	.....	....	Is too imbecile to answer questions correctly, and no error of refraction is proven by the ophthalmoscope.
38	S. V. R.	19	M	" "	Parox. Mania	....	H. $\frac{1}{20}$	H. $\frac{1}{20}$	
39	A. S.	13	M	5 "	Parox. Mania	. . .	H. $\frac{1}{40}$	H. $\frac{1}{40}$	
40	C. Q.	55	F	M'y "	Dementia	....	.....	....	Has very deep excavation in each optic disk, with strong pulsation of central veins.
41	F. G.	18	F	3 "	Ch. Mania	$\frac{20}{20}$	H. $\frac{1}{24}$	H. $\frac{1}{24}$	
42	E. T.	31	F	Sev."	Dementia	$\frac{20}{20}$	H. $\frac{1}{40}$	H. $\frac{1}{40}$	Ophthalmoscopic appearances normal.
43	V. F.	24	F	6 "	Mania	$\frac{20}{20}$	H. $\frac{1}{20}$	H. $\frac{1}{20}$	
44	P. S.	25	F	Sev. "	Parox. Mania	....	H. $\frac{1}{18}$	H. $\frac{1}{18}$	
45	S. B.	33	F	25 "	Mania	....	H. $\frac{1}{20}$	H. $\frac{1}{20}$	Refraction determined by ophthalmoscope only.
46	M. C.	24	F	2 "	Dementia	$\frac{20}{30}$	H. $\frac{1}{40}$	H. $\frac{1}{40}$	Ophthalmoscopic appearances natural.
47	F. C.	20	M	5 "	Dementia	....	H. $\frac{1}{40}$	....	Disk, etc., normal.
48	G. B.	28	M	12 "	Dementia	....	M. $\frac{1}{4}$	....	Left eye lost. Has incipient cataract in right eye.
49	H. C.	19	M	6 "	Dementia	....	H. $\frac{1}{30}$	....	
50	Mr. R.	40	M	Sev."	.....	$\frac{20}{40}$	H. $\frac{1}{20}$	....	
51	Mr. D.	28	M	10 "	.....	$\frac{20}{20}$	Am. $\frac{1}{42}$	Am. $\frac{1}{42}$	Without glasses, sight $=\frac{20}{30}$, with $-\frac{1}{42}$ cyl. S. $=\frac{20}{20}$.
52	Mr. C.	42	M	2 "	.....	$\frac{20}{20}$	Ah. $\frac{1}{42}$	Ah. $\frac{1}{42}$	Without glasses, S. $=\frac{20}{30}$, with $+\frac{1}{42}$ cyl. S. $=\frac{20}{20}$.
53	E. C.	22	M	6 "	.....	$\frac{20}{40}$	M. $\frac{1}{4}$	M $\frac{1}{5}$	
54	W. T.	16	F	2 "	.....	$\frac{20}{20}$	M. $\frac{1}{40}$	M. $\frac{1}{30}$	

PLACENTAL DELIVERY AND UTERINE INVOLUTION.

By EZRA M. HUNT, M.D.,

METUCHEN, N. J.

THE management of the placenta seems to have admitted about as many shades of opinion and diversity of practice as obtain in the management of the fœtus itself. Twenty-five years ago the direction of most of the leading professors was to leave its expulsion to nature, or await at least for an hour the completion of the process. This direction, like many other absolute rules, is mischievous just because time is a relative thing. The department of obstetrics does not admit of such close mensuration. Time is an element to be considered because it has some general relation to the usual proximity of the various processes, but is nevertheless liable to many variations to be watched for by the practitioner. The supine position, the absence of motion and other incidents disturb the law by which, under other circumstances, the placenta might be voided. The fact that it will remain so long partly in the vagina and partly in the uterine cavity, and that its expulsion can be accelerated by friction, coughing, pressure, change of position, etc., shows how amenable it is to artificial aid, and so far indicates that this is to be employed if there are no complications arising therefrom. We are inclined to think that of all the things in usual obstetric position and subjective condition which nature entirely unassisted is least likely to do perfectly, complete placental expulsion stands foremost. This is often attributed to feeble vaginal contraction, but often there is uterine inertia as well. Books and sometimes teachers do not emphasize this. Yet we know excellent practitioners who uniformly give a dose of ergot immediately after the birth of the child. We believe that a vast majority practically do more towards the delivery of the placenta in most cases than its mere removal from the vagina after its complete expulsion from the uterus.

We are led to this remark by a recent case, which at least illustrates what not to do.

A woman was delivered of her fifth child without medical aid, and relied upon a neighbor, whom she told she would call upon afterwards to assist, if need be, with the placenta. The friend considered herself efficient in pulling, and so as the placenta did not come, pulled upon the cord. There was also some

evidence that the fingers had been introduced into the vagina and through the os uteri. Several clots of blood had been scooped out, which had only served to renew a uterine hemorrhage, not gushing, but still of moment. When called, I found upon examination a distended womb, great pallor, and blood clots in the lower cavity of the uterus, but could feel no cord or placenta. I at once made further inquiry, and had a basin brought me full of clots, with a cord two feet in length lying amid them, which had been broken off close to its attachment with the placenta. On introducing the hand and making pressure with cold over the womb, I found the cavity filled with blood, but no placenta apparent. Further introduction revealed hour-glass contraction about midway of the uterine cavity, through which steady and careful pressure with the cone-shaped hand brought us to the placenta, not adherent, but lying loosely in the upper segment. As I had been summoned in passing, several miles from home, no ergot was at hand, but there was no sudden increase of hemorrhage, and the uterus began to contract with the removal of the mass. There had been no complication in the case at the start, but the partial introduction of the hand, and the severe pulling upon the cord before the placenta had fully separated, had excited the hour-glass contraction, at least this is the probable explanation.

We are more and more impressed in midwifery practice how much the uterus needs careful regard after the birth of the child. Promiscuous and severe pressure on the one hand, and unguarded laxity on the other, are both injurious. The physician needs soon to know by outside encompass how much contraction has taken place, and to know by examination the position of the placenta. The contraction is the best test of mode and time of procedure, except in those cases where contraction needs to be excited by the introduced hand. There is in many a placental delivery, trouble arising from a failure to remove the placenta just at the time when the uterus is partially acting, and when there is need of aid by a drink of cold water, coughing, reflex irritation, or such oscillating movement or such introduction of the hand as shall envelope rather than pull, and thus aid the expulsive process. Rupture of the cord is very rare with proper management, and yet possible. Some time since, in a severe labor, we had severed the cord and were busy in striving to revive an asphyxiated infant. On returning to the patient in four or five minutes, we found a flushed face changed to entire pallor, and the uterus had suddenly distended. A slight pull upon the cord brought it away ruptured only a little from the place of insertion. Amid a column of hot blood we found the placenta at the very fundus, mostly detached and non-adherent. The only possible strain there had been upon the cord was in the last rapid expulsive effort upon the child after a long labor. A cord about thirteen inches in length, and a placenta as yet in the fundus, had by a jerk torn the fibres and caused an internal hemorrhage, which came very near proving fatal. In a recent case, just at the birth of the child, we found it impeded in its expulsive change of position, and felt the cord tense and rigid as the child passed as far as the umbilicus. In memory of the other cases, the cord was promptly cut. When in due time the placenta which was attached at the fundus was delivered, the cord was found just twelve inches long. In another case the next day, it was thirty. These variations in length are not unusual. Generally, even with a short cord, no contingency arises from this; but where the attachment of the placenta is at the fundus, and the expulsion accomplished rapidly while the placenta is closely adherent and the uterus does not contract down rapidly from the upper segment upon the departing fœtus, the accident may easily give rise to hemorrhage, either by violently separating the placenta or rupturing the cord. That is a good sentence of Leishman's, which says: "One hand is to be placed over the fundus uteri, which is to be gently pressed and followed in its descent by the hand, a practice which tends to promote the speedy separation of the placenta," p. 274. While the cord is available as a guide, it is always to be remembered that the most natural escape of the placenta is edgewise, and not that of a mushroom pulled by its stem. It is also to be remembered that the contraction which separates the placenta does not always insure its complete expulsion through the os uteri. The normal action of the uterus in delivery and after, is that of alternate contraction and relaxation. The presence of a separated placenta in the uterus fairly contracted, often excites sufficient action to aid in expulsion, but if not, its presence is favorable to hemorrhage. Its removal overcomes this both by withdrawal of the mass and the reflex irritation of the hand, "which is often aroused by digital examination, which seems to excite the nerves that are distributed in some abundance to the tissues of the perineum." (Leishman, p. 570.) There may be contraction of the upper and lateral segments of the uterus, and yet the cervix, os, or vagina permit the placenta to remain. The judgment of the practitioner is required in each case, whether to accomplish removal in a very few minutes or be patient under long delay. Books are rightly conservative, because caution is the better part of valor. But we doubt whether "the practitioner should wait fifteen or twenty minutes before passing the finger into the vagina, to ascertain whether the separation of the placenta is complete," nor, if feeling the side of the placenta and not the cord, he should wait ten or fifteen more for separation.

Even the complete expulsion of the placenta is not always the test of the safe contraction of the uterus. We like the excellent remarks in a recent brief review in the MEDICAL RECORD (July 8, 1876), of Robert's Practice of Midwifery. The reviewer, after objecting to a limitation of the third stage of labor to the separation and expulsion of the placenta and membranes, says: "We believe that it would be much safer to teach that the third stage of labor necessarily includes *permanent uterine contraction*." There is not enough thought about this or about that change called "involution of the uterus," which, though not complete for a long time in a normal case, is rapid during the first week. From its weight of one and three-quarter pounds, the uterus has to hasten back to two or three ounces. Its cavity of 400 cubic inches is to come back to one or two, and its surface of 350 to six square inches. The reduction of its hypertrophied lining, the fatty transformation and absorption of its multiplied fibres, the desquamation of its internal surface and development of new membranes, are reparations and readjustments almost as wonderful as its far more speedy developments (see Barker on Puerperal Diseases, page 93). When contraction and involution take place properly, in one week the organ cannot generally be felt above the pubes, and more than half the work has been accomplished. Any arrest of this process in any form is fraught with no small risk. The uncontracted cavity will not remain a vacuum, the arrested involution of fibre will be supplemented by hypertrophy of tissue, secretions will be contaminated, and metritis in some of its milder or more pronounced

forms is imminent. In those insidious cases which too often suddenly make the practitioner conscious of serious invasion, the condition of the uterus as to contraction and involution is among the earliest informants. Delayed involution always is the signal for special watchfulness and close inquiry. A recent case will illustrate.

Mrs. O., a primipara, had a labor entirely natural of about six hours' continuance, and ending at two A. M. I found her at eight A. M., as comfortable as could be desired. The uterus had contracted as well as usual, although the after-pains were light; there was no hemorrhage, and nothing in any way unusual in the case. During a two days' absence she was well cared for by a medical friend. On the morning of the fourth day, I found her very comfortable, but with greater fulness than usual. This was not abdominal, but owing to defective uterine contraction. Yet as there was no hemorrhage, no interference with usual discharges, and a good general condition, it did not excite much anxiety. At noon that day she experienced a severe rigor. There was no pain, and as the breasts were rapidly distending, I was disposed to connect it with the lacteal secretion. An early visit the next morning showed a pulse still rapid, and but little exacerbation. The thermometer, to my great surprise, recorded 105°. A second thermometer did the same, and trying it on two or three well persons, I found that my long-used instruments had not deceived me. Distention had increased so that the uterus reached well up to the gastric region. Pulse was 120, but there was absence of other serious symptoms. There was no expression of pain. Careful palpation and examination showed but very little tenderness, and this confined to a spot not larger than a dollar near the right inguinal space. Aconite and nitre were freely administered. Ice was used internally, and frequent sponging externally to moderate heat. A turpentine stupe was applied over the uterus till it produced redness and a slight vesication. Injections of carbolic acid were ordered per vagina. A Dover's powder was given at night to secure sleep. The next morning, June 10th, temperature had reached 106°, but fell to 105¼; at night a dose of quinine being given as an antipyretic. The case was regarded as one of metritis supervening upon imperfect involution and tumefaction of the uterine tissues. The plan of treatment was chiefly that indicated by Fordyce Barker, in his excellent chapter on Puerperal Metritis.

On the fourth day from the chill, the temperature varied from 104¾ to 105°, with pulse from 110 to 120. This high temperature continued to surprise me because the patient suffered little pain, took food readily, and did not give the impression of alarming sickness, except in rapid breathing and complaint of extreme heat. Pressure, however, revealed more soreness over a circumscribed portion of the uterine walls, where the first pain had been manifest. Aconite and nitre were freely administered, and twelve grains of quinine prescribed per day in two doses. The midday temperature fell to 103°, but rose in the evening again to 105°, with no decrease in frequency of the pulse. The next morning I found temperature 101 rising to 103° during the day, and the general symptoms were not so phlogistic. Nourishment was well received, and restlessness easily controlled by an evening opiate. There was a nervous mobility and discouragement which was troublesome. The condition of the uterus was carefully guarded each day, efforts being made to reduce its size by pressure, by bandaging two or three times each day by myself, and the free use of carbolic syringing. I am sure much benefit was derived from careful manipulation, and that involution was much aided thereby. There was improvement so soon as the uterus commenced to diminish in size, and convalescence was fully established about the ninth day from the chill. Improvement kept very perceptible pace with the subsidence of the uterine tumor. An examination of authorities surprises one to find how little is said upon the subject of uterine involution. Some cases in practice have made us to feel that it is the business of the practitioner to know not only that the uterus has contracted after labor, but at subsequent visits to examine the abdomen, with the purpose of determining the bounds of the uterine tumor with precision. It is a more important indication of the puerperal condition, and a source of information more valuable than estimated by some practitioners. Even where there is no chill, no revealed metritis, no cessation of lochia, there is often bad "getting up" from retarded involution. This may be much relieved by ergot, nux vomica, quinine, by external palpation, and, where needed, by turpentine stupes and carbolic injections. We have manifold wet preparations and lithographs of the condition of the womb in its development, and of the fœtus and membranes it contains. It would be an aid in the subsequent widwifery, if the practitioner could trace the daily changes from the time of fœtal delivery to the point at which the process of involution is completed. The chronic results of incomplete involutions we have in the last few months had the opportunity to trace in a prolonged case of metritis and pelvic cellulitis so typical as to add to our diligent watchfulness to avoid such results. We are convinced that the attention of the practitioner needs to be more thoroughly fastened upon the third stage of labor, and upon those sequelæ connected with the reparative and reconstructive return of the uterus to its unimpregnated state.

Reports of Hospitals.

BELLEVUE HOSPITAL.

NOTES OF PRACTICE AND ITEMS OF TREATMENT.

SUBACUTE PLEURISY—SYMPTOMS REFERRED TO THE ABDOMEN.

THE chief items of interest in the case were the absence of initial symptoms and the diversion of the attention from the real seat of the disease, by the fact that all the pain was referred to a region low down in the abdomen. A male patient, æt. 35, a glass-blower and a moderate drinker, had been sick about twenty days. He was attacked with a moderately severe pain just above the left hip, paroxysmal in character, occurred independent of cough, extended toward the median line and upward over the chest; and after about twelve days it became so severe that he was obliged to cease work. The patient described the pain as a burning pain, and was unable to continue his work on account of its constancy and severity upon the left side of the abdomen, and, at the end of the twelve days, shortness of breath interfered with his blowing. At the time of the examination his pulse was 118, respiration 36, temperature 100¾ F., but was 102¾° F. when admitted. The left pleural cavity was filled with fluid, of which ℥ xii. had been removed, hoping thereby to remove the pressure from

the absorbents sufficiently to permit them to take care of the fluid without further surgical interference. Full diet, half-drachm doses of syr. ferri iodid. three times a day, and, were it possible, champagne with his dinner, was the plan of treatment recommended. A blister was not objected to for a patient having the strength this man had, but was not specially commended unless there was considerable pain in the side. The chief interest in the case consisted in the obscurity of the symptoms, the inability to diagnosticate the disease independent of physical examination, and the abdominal pain. The visiting physician remarked that, in children suffering from pleurisy, the pain was quite commonly referred to the abdomen.

SUBACUTE PLEURISY—EXCEPTION AMONG THE PHYSICAL SIGNS—SUGGESTIONS CONCERNING PARACENTESIS.

In the case before us there was flatness upon percussion from an inch above the angle of the scapula downward; the apex of the heart was beating nearly in the median line, and the voice sounds were heard to the bottom of the pleural cavity. The bronchial voice heard over the entire left chest behind was regarded as exceptional among the signs indicating the presence of fluid in the pleural cavity in adults, but it was quite commonly present in children. The special interest in the treatment centred upon the question of paracentesis. The visiting physician was of the opinion that experience taught us that tapping was not to be resorted to unless it became absolutely necessary; that is, that efforts should be first made to remove the fluid by other means, such as counter-irritation, tonics, diuretics, etc., and when these failed, after being faithfully tried, then paracentesis. For there was an uncertain element in prognosis in not knowing exactly what the character of the pleurisy was; not knowing exactly what condition of lung was present. If a patient who had a predisposition to phthisis acquired acute pleurisy, the pleurisy would have an entirely different anatomical character, and would run an entirely different course from that pursued by an acute pleurisy occurring under other conditions. Those were the cases which were apt to resist medical treatment, and when the chest was tapped did badly, and died with the lesions of phthisis in the lungs, together with the peculiar form of pleurisy commonly found in that class of cases, namely, empyæmia.

HABIT OF TAKING OPIUM—INORDINATE USE OF THE HYPODERMIC SYRINGE.

The patient, formerly an orderly in the hospital, began the use of morphia subcutaneously for the relief of pain, and had continued its use for two years. He had employed Magendie's solution, and had increased the quantity until finally he was taking three hundred minims every twenty-four hours: the largest number of injections taken in the same length of time was twelve. The appearance of the man's body and thighs was very striking, for they were studded with discolored spots, cicatrices from old punctures, and localized abscesses, some of which were surrounded with erysipelatous inflammation. The appearance was nearly the same upon both the posterior and anterior aspect of the trunk; for, failing to find sufficient uninvaded territory upon the anterior portion, he had learned to thrust the needle of the syringe into his back. At the time of our visit he was suffering severely from the effects of the discontinuance of the opium, which had been cut off entirely and at once.

TREATMENT OF CHRONIC DYSENTERY.

For example, a man has three, four, or five discharges daily: First, with reference to diet, milk is the best article of food that can be employed. This article is very frequently condemned by the laity when suggested in connection with the treatment of diarrhœa and dysentery; and truly it is liable to aggravate the case unless properly administered.

Caseine is exceedingly indigestible, and if it remains unchanged in the alimentary canal it will increase the severity of all the symptoms. When milk is administered, therefore, it should always be combined with an alkali; for thus combined it is much less liable to disagree with the patient. A very convenient alkali is the liq. calcis saccharate, which diluted with water, may be taken in half-drachm doses, after taking the milk. Meat usually agrees with the patient, because it possesses a large amount of nourishment in a small bulk. Meat without fat should be used, and it is most serviceable when taken raw, scraped, and salted a trifle; raw meat may be the only thing with which the life of a child suffering from acute dysentery can be saved. It may be given in teaspoonful doses every two, three or four hours, according to the severity of the case. Milk should not be used at all for children, during the earlier part of an attack of dysentery. Among the meats, mutton is most easily digested, beef next, and poultry third. Potatoes always work badly in severe cases of chronic dysentery. Turnips, beets, cabbage, and those articles which contain woody fibre, are not well borne. In some cases, rice is the only article belonging to the starch group that can be employed. Certain patients can take eggs with advantage, others cannot. If bread is used, it should be stale.

A careful regulation of the diet of this class of patients is competent to do more than any one element towards effecting a cure. They should be kept in bed, and only a small quantity of food taken at any one time.

ITS MEDICINAL TREATMENT.

The first indication is to stop the irritation in the lower part of the bowel. If ulcerations are present they should be treated topically. It occasionally happens that all the trouble arises from a single ulcer. In some cases the ulcers cannot be found; and again, the case may not be cured after the ulcers have been found and healed by means of local applications. For, there may remain a peculiar irritable condition of the nerves which will keep up the discharges from the bowels almost indefinitely. To allay such irritability of the nerves supplying the lower part of the bowel, administer injections containing free doses of the bromide of potassium. Such injecions are especially serviceable in the treatment of the dysentery among children. Laudanum may be combined with the bromide if an anodyne is required. The remedy should, if possible, be used locally.

Injections of carbolic acid answer a very good purpose for correcting offensive discharges, but not to effect a cure. Astringents, as a rule, do not work well in the treatment of chronic dysentery. Castor oil is a very serviceable remedy in the treatment of either the acute or chronic form of the disease.

Oils have a tendency to produce watery discharges from the mucous membranes with which they come in contact.

Linseed oil is eliminated by the respiratory mucous membrane. Castor oil passes out through the mucous membrane of the alimentary canal, and produces free watery discharges. The action of castor oil then is to change the character of the intestinal secretions from an exceedingly viscid, albuminous, fibrinous quality, to a much more watery, and also changes the charac-

ter of the inflammation from one having a tendency to produce pus, to one which is accompanied by a more watery discharge, and one which will subside of its own accord within a short time. The theory concerning the action of this remedy is that it is first cathartic, and then astringent; but the fact in practice is, that the remedy has more control over dysentery than any other single article in the materia medica. In the first place follow the cathartic dose of castor oil by a full dose of laudanum, and then commence the steady treatment by using two drachms of the oil, combined with twenty drops of laudanum, mixed up with mucilage of gum arabic, and administered every two, three, or four hours.

The majority of acute cases in children will yield to castor oil and laudanum combined, and so it is with chronic dysentery occurring in adults. It may also be used as an adjuvant to other measures.

One peculiarity attending the use of castor oil combined with laudanum, is that the patient certainly gets more sleep than when laudanum is administered alone.

Chalk, opium, and astringents usually fail; and bismuth does not, as a rule, have much control over chronic dysentery.

Acetate of lead is a remedy which has acquired considerable reputation in the treatment of bowel affections, but in chronic dysentery it is much more effectual when given by enemata than when given by the mouth. Not more than from two to four grains should be used at a dose, and the menstruum should not be more than three ounces in quantity. Water may be used as a menstruum, and an injection given immediately after a passage. These injections may also contain laudanum. Acetate of lead is a local anæsthetic, as well as a general astringent.

Progress of Medical Science.

A Case of Athetosis.—Dr. Bernhardt, of Berlin, reports a case, which agrees in all essential particulars with the description of the disease to which Hammond has given the name of Athetosis. The most noticeable symptoms are restless movements of the fingers, and less markedly of the toes on the right side, the rest of the extremities being entirely unaffected; slight equino-varus position of the right foot with tension of the tendo Achillis, and flexion of the toes; partial anæsthesia of the right side of the body, with slight loss of power on the same side; and hypertrophy of the muscles that are in constant action. The disease has lasted nearly eight years, and all the methods of treatment tried have proved utterly useless. These symptoms appeared first during recovery from some acute disease, probably one of the exanthemata, which confined the patient to his bed for several weeks, when he was four years old. His parents were both healthy, but one brother and one sister suffered from chorea, which proved fatal to the brother.

Dr. Bernhardt was particularly struck with the resemblance this case bore to hemichorea, and thinks it should be classed with the disease that has recently received the name of post-paralytic chorea (Weir Mitchell). In this disease, according to Charcot and Weir Mitchell, a choreic condition is developed in the paralysed limbs of patients, who have suffered for a long time from hemiplegia. Charcot has shown by post-mortem that the seat of the disease is on the opposite side of the brain, in the posterior part of the thalamus opticus and its immediate neighborhood, while Bernhardt agrees with Hammond and Charcot in theoretically considering the lesion of athetosis to be a sclerosis of the corpora striata or optic thalami.—*Virchow's Archive*, May 27th.

Two rare Dislocations.—Dr. Gallez recently reported to the *Académie Royale de Médecine de Belgique* two cases of very rare dislocations. The first was a luxation of the symphysis pubis. The patient, who was 35 years of age, and by occupation a puddler in an iron-foundry, was in the act of throwing a heavy mass of iron into a furnace, when his foot slipped and he experienced a severe pain and a cracking sensation in the pubic region. Although walking caused him much suffering, he continued to work for five days, before he sought medical advice. When he presented himself to Dr. Gallez, palpation showed that the left pubis was displaced downwards, forwards and outwards, and formed a tumor under the integuments. The spine of the pubis on the left side was a finger's breadth lower than that of the right side. The articular surface was directed forwards and outwards, its posterior border resting on the anterior border of the descending ramus of the right pubis. The pubis moved when the thigh was flexed and adducted. The bladder was not affected. The patient resumed work on the following day, and would only consent to wear a bandage, which did not however suffice to retain the bones in proper position.

A few days later, Dr. Gallez was called to see a laborer, aged 53 years, who had fallen violently on the edge of a cylinder. The patient fell on his epigastric region, and experienced at once a pain so severe that he was obliged to leave his work. Examination revealed a tumor as large as an almond over the lower end of the sternum, which, when pressed upon from above, moved downwards into the position of the xiphoid appendix; the pain on movement was severe, and a bruit was produced similar to the dry click of the lid of the small box used for wax-lights. Dr. Gallez was able to reproduce and reduce the luxation at will, and finally retained the appendix in position by means of a compress and adhesive plaster. No special symptoms were excited, and the patient resumed work four days later. There are only two other cases of luxation of the xiphoid appendix on record. They were both reported by Malgaigne, and in both the luxation was inwards and was accompanied by vomiting. In Dr. Gallez's case the posterior chondro-xiphoid ligament was ruptured, and the anterior ligament carried the cartilage forwards. This is probably a unique case of *pre-sternal dislocation of the xiphoid appendix*.—*Le Mouvement Médical*, June 10, 1876.

Sparkling Synchysis.—This singular affection of the eye was first described in 1828 by a physician of Périgueux; in 1844 Desmaires proved that it was due to the presence of flakes of cholestearine in the vitreous humor, and in 1850 Blasius tried to prove that these flakes were situated in the crystalline capsule. M. Poncet has lately had an opportunity to examine two eyes in which M. Trelat had discovered the existence of sparkling synchysis during life. The eyes were preserved in Müller's fluid, and the following are the results of the examination:

1. The floating particles do not consist entirely of cholestearine; crystals of cholestearine and of tyrosine, and phosphatic globules enter into their composition. These last consist of crystallized phosphates on which crystals of tyrosine are sometimes deposited.

2. Sparkling synchysis is a lesion of the vitreous

humor; when the lens has undergone an alteration, it is always secondary to that of the vitreous humor.—*La France Médicale*, May 13th.

Acute Glaucoma cured in a few hours by Paracentesis of the Sclerotic.—At the séance of the *Société de Chirurgie*, on May 10th, M. Le Fort read a paper in which he presented a new theory of glaucoma. He holds that acute glaucoma consists in a secretion of serosity by the external surface of the choroid; this fluid is imprisoned in a space comprised between the sclerotic and the choroid, and closed in front by the outer border of the iris, and behind by the optic nerve; the fluid accumulated in this space pushes the lens forward, and the choroid and retina inward; hence the excavation of the papilla, an excavation only apparent and due to the pushing forward of the retina around the papilla. His treatment consists in puncture of the sclerotic to allow the fluid to escape, and he has twice cured acute glaucoma by this operation. In the first case, the puncture was made between the superior and external recti, and gave exit to a serous fluid. On the next day the patient could read ordinary print, and fifteen days later he left the hospital cured. In the second case, the puncture was made in the same situation, and a few drops of a serous fluid, but no vitreous humor, escaped. On the next day the patient could read No. 8 of Snellen's scale, though before the operation he could scarcely distinguish the characters of No. 30.

In the discussion that followed, M. Perrin admitted that the facts reported by M. Le Fort were very interesting from a clinical point of view, but he could not accept the latter's theory of glaucoma. M. Le Fort did not bring the results of ophthalmoscopic examination to the support of his theory, neither did he indicate the presence of that typical symptom of acute glaucoma, contraction of the field of vision. M. Perrin admitted that the results of ocular paracentesis are incontestably good in cases of marked intraocular tension, but pointed out that the operation of Hancock for acute glaucoma has been completely abandoned in England. In closing the discussion, M. Le Fort did not attempt to defend his theory, but called attention to the immediate and excellent results of the operation in the two cases cited. He thought that his operation, which is performed in the middle of the sclerotic, should not be assimilated to that of Hancock, which consists in a puncture at the junction of the cornea and sclerotic, just over the ciliary circle, and in a very vascular region. Puncture of the sclerotic is not dangerous, and may be tried before resorting to iridectomy.—*La France Médicale*, May 13th.

Possible source of Error in the Nitric Acid Test for the Biliary Pigment.—Gmelin's test for the coloring matter of the bile in the urine consists in letting a few drops of nitric acid gently flow down the side of the test-tube which contains the urine. The acid falls to the bottom of the tube, and by diffusion reaches the biliary pigments, which undergo the usual coloration, producing yellow, green, blue, and red zones in the fluid. M. Cazeneuve warns us against a possible error in this experiment. It is well known that when alcohol and nitric acid are mixed, the former causes a transformation of the latter into nitrous acid, with the immediate production of the very volatile nitrous ether. This reaction takes place without any coloration. If, however, the acid be allowed to flow slowly down the side of a test-tube containing alcohol, it will fall to the bottom, and the two fluids will then react slowly on one another. At the end of a minute a magnificent greenish-blue zone appears, with a yellowish-green zone below it, and, a few moments later, a reddish zone above it in the superjacent alcohol. Here the nitrous acid formed from the nitric acid appeared at the same time, partly as a hypoazotide—hence the blue, green, and yellow tints—and progressively etherized the alcohol; in the end all coloration disappeared. It is important, then, when using Guvellin's test for the biliary pigment, to be sure that the suspected fluid contains no alcohol.—*La Tribune Médicale*, June 4th.

Sudden Death in Phlegmasia Alba Dolens.—At a recent meeting of the *Société de Médecine de Strasbourg*, Dr. Roth reported the following case, which had occurred on that very day. He was called to see a patient who had been confined fifteen days before, and was suffering from phlegmasia alba of the left leg. This patient hardly considered herself sick at all, and had been up part of the day. When the doctor arrived she was sitting up in bed, conversing with her attendants. M. Roth found a small clump of varicose veins in the middle of the left thigh, and a tumor of the same nature on the leg. In examining this latter tumor he passed his hand lightly over it, when the patient suddenly complained of feeling badly, fell back on the bed, turned her head to one side, drew a few deep inspirations, and died in a few moments. The Doctor asked the Society if this almost instantaneous death could be attributed to embolism of the pulmonary artery by a clot detached from a varicose vein.

Prof. Schützenberger, in reply, said that that was the only admissible explanation. A clot can travel from the thigh to the right side of the heart in a few seconds. He recalled a precisely similar case, in which Koeberlé made the autopsy and found a clot in the pulmonary artery. He had himself seen two brothers with large varicose veins, both of whom suffered from phlebitis, and both died suddenly and almost instantaneously, with symptoms of suffocation. The Professor believes that many of the cases of sudden death during the puerperal period are due to embolism.—*Lyon Médicale*, June 18th.

Injections of Chloral in Hydrophobia.—M. Prévost reported the following case at the séance of the Société de Biologie, on June 3d. A woman was bitten by a rabid cat in the month of July, 1875. The wound was cauterized with ammonia, but no other treatment was adopted. The patient became very melancholy, and was pursued by a presentiment that she was about to become mad, but her general health continued good, and the wound healed rapidly. Six weeks after the injury she began to suffer again from pains at the seat of the injury, and suppuration set in. She became nervous and irritable, and the presentiments were redoubled, and a few days later she was seized with a perfectly characterized attack of rabies. The paroxysms were extremely violent and very numerous. Hypodermic injections of morphine and inhalations of chloroform were tried, but failed to quiet the patient. Injections of chloral into the dorsalis pedis vein were then tried; one drachm was injected the first time, and the injections were repeated several times in twenty-four hours. These quieted the patient and produced a pretty calm sleep, but she gradually became weaker and died, without, however, having any more paroxysms. At the autopsy only the cord could be examined, and it was found to be healthy.

M. Hanot stated that he had used this treatment in a case of hydrophobia in 1874, and his patient was quieted for twenty-four hours.—*Gazette Hebdom. de Méd. et de Chir.*, June 9th.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, September 2, 1876.

THE RESTRAINT SYSTEM IN THE TREATMENT OF OUR INSANE.

THE recent articles in the London *Lancet*, by Dr. Bucknill, on the American asylums for the insane, has infused a fresh interest in the management of these institutions, and has invited the criticism of our English brethren regarding our methods of treatment. The *Lancet* has taken occasion, in a general discussion of the subject, to speak very pointedly against the restraint system, as employed in our asylums. We are not surprised to find that this is done in a becoming spirit, and with a view of "promoting the interest of the insane, and the credit of medicine as a science in the United States."

Although much has been said on both sides of the question, the gratifying experiences in Great Britain and other countries give the best side of the argument to the non-restraint system. From the time of Pinel and Esquirol to the present, there has been a growing sentiment in the profession that the less we have to do with the strait-jacket the nearer will we approach the rational and scientific treatment of the lunatic. In fact, the real improvement in the treatment of the insane has been proportioned to the degree with which humanity has been infused into it. As a matter of principle, the non-restraint system is eminently correct, and should be considered a primary factor for good in all our estimates of success in treatment. It is true that very serious accidents frequently occur, and that sometimes valuable lives are sacrificed as a consequence of allowing too much freedom to insane patients; but if these occurrences are to be used as arguments in support of the restraint system, we have not progressed much farther than we were two hundred years ago. Rather should we endeavor, by a more thorough study of the rational history of insanity, to obviate entirely the necessity for even occasional restraint in the most innocent lunatics, than from ignorance or convenience submit patients to a method of treatment which not only does not cure, but in the vast majority of cases does harm. So long as it is the ambition of alienists to be considered scientific physicians, and not mere jailors, this idea will be kept in view, and all the hindering circumstances to its fulfilment will be patiently and strenuously combated.

That the American asylums have the unenviable reputation of habitually resorting to restraints is, we are convinced, in no small degree due to their systems of management. In the majority of the American institutions in which restraint is practised, it is almost impossible to test in a thoroughly practical manner the opposite system. The reason for this is, that too much is expected of the medical superintendent. He is required not only to be eminent in his specialty, but to such a professional qualification must be attached the attainments of architect, general manager, corresponding clerk, chief commissary, farmer, and landscape gardener. In the exercise of these multifarious duties it is impossible for him to give that medical care to the inmates of his institution which his position as chief medical director would seem to warrant. As a consequence, much of the details of management are left to medical assistants and nurses; and the assertion of the *Lancet*, that "the American system is in a large measure an habitual use of restraints to save trouble, or as some of the more candid superintendents put it, to avoid risks," is not altogether without foundation in fact.

In the present light of experience in the treatment of the insane, this is possibly the best excuse we have to offer for a persistent adherence to a reprehensible practice; and the sooner we remove the obstacles to its overthrow, the better for the reputation of our asylums and of the distinguished gentlemen who have them in charge. The superintendents themselves are gentlemen whose knowledge of their specialty is equal to any of their class in the civilized world, and their sense of humanity is such as to place them above even the suspicion of cruel practices; still, the circumstances of management by which they are surrounded, lay them open to a criticism to which as individuals they are hardly responsible. We repeat, then, that the reform in the treatment of our insane must begin in the reform in our methods of administrating the affairs of our asylums. It is useless to deny that there have been many examples of atrocious cruelty in the treatment of insane patients in American asylums by their attendants, and that these are directly due to the more or less prevalent system of applying strait-jackets and other instruments of restraint. The counter-charge that patients in English asylums are more subject to accidents and more given to homicides, etc., by a neglect of such restraint, than similar patients in our own asylums, is, even if true, a poor argument in support of a

practice which not unfrequently makes absolute cruelty one of its conditions. Although confessing to a national pride in the success of our institutions, we must acknowledge that we are behind our English cousins in the management of the insane, and that the *Lancet*, in advocating the claims of the non-restraint system, leads popular professional sentiment.

In regard to the uselessness of restraint for the purpose to which it is applied, that journal says:—

"We might ask the alienists of America to answer this question frankly for themselves. Is the condition of the patients in their asylums satisfactory as regards their immunity from accidents? Does the use of restraint prevent misadventure? Have there been no homicides, no cases of patients dying unattended in their beds, no broken bones, no bruises? If the system pursued were successful in the United States, the experience of alienists there would be directly opposed to that of our own superintendents. Dr. Conolly, in the reports just quoted, assigns as his primary reason for abolishing the use of restraints at Hanwell, 'the apparent inefficiency of mechanical restraint as a means of preventing accidents and mischief.' He distinctly alleges, and the observations of superintendents on this side the water strengthen the conviction, that coercion increases the excitement, and aggravates the very propensity to violence it is meant to check. It does more, and this is our third consideration,—its use is fatal to the benefit of the insane. Dr. Conolly says: 'One cherished error of the advocates of restraint is, that *it can at least do no harm to the incurable*. The fact is, that *no patients are more permanently injured by it, in temper, feelings, and habits.* So far from preventing violence, it provokes resistance. The patient is annoyed, irritated, and the propensity to do mischief is strengthened. Patients permitted to walk while in restraint were still capable of inflicting injury upon others; they were not protected from causes of irritation, or from the attacks of other patients.' Restraint does not prevent suicide, homicide, bodily injury, or death; it of necessity increases the irritation of the patient suffering it, and it inevitably engenders dirty habits. It is not a curative expedient; it is simply and solely a device to save trouble, or, if any one prefers the phrase, 'to avoid risks,' which, as a matter of fact, are not even reduced, much less avoided, by the irrational practice adopted."

Reviews and Notices of Books.

Leçons sur les Kératites. Par F. Panas, Chirurgien de l'Hôpital Lariboisière, Professeur Agrégé à la Faculté de Médecine de Paris, etc. Paris: A. Delahaye et Cie. 1876.

This very readable little work consists, as its title indicates, of a series of lectures on the inflammations of the cornea, delivered by M. Panas in the Paris School of Medicine. The first four of the sixteen lectures it contains are devoted to the consideration of the vascular and nervous supply of the eye, with especial reference to the cornea, and evince an amount of study and research that does great credit to the author, though there is perhaps but little that is entirely original in them. He lays stress on the facts that irritation of the cervical portion of the sympathetic on one side causes an increase in the intraocular tension on that side only, while irritation of the trigeminus on one side augments the tension in both eyes, and concludes from them that the fifth nerve is the medium through which sympathetic ophthalmia is produced. Division of the fifth nerve at or in front of the Gasserian ganglion leads to softening and destruction of the cornea, with apparently all the signs of the most violent inflammation; but it is remarkable that the process is not attended either by pain or increased heat. These effects are not produced when the nerve is divided behind the ganglion, from which the author concludes that the ganglion exerts a special influence on the circulation and nutrition of the eye. It is rather confusing in this connection, however, to find it stated in another place that the action of the trigeminus on the circulation of the eye is exercised through the medium of the sympathetic, and in still another that the fifth nerve is the trophic nerve *par excellence* of the eye, either directly or by means of some fibres that join it from the sympathetic. These three statements seem to be in direct contradiction.

In the fifth lecture he speaks of the influence of certain diseases on the circulation of the eye, and cites some interesting cases of tabes dorsalis and local asphyxia of the extremities with which ocular disturbances were connected. The sixth lecture is devoted principally to the consideration of the influence of the cornea on the aqueous humor. The author agrees with Lebert that it does not take part either in the secretion or the absorption of that fluid, and that as long as the membrane of Descemet remains intact, it offers an insuperable obstacle to its escape. Each individual endothelial cell, however, protects only that portion of the cornea which it covers, and if any one or more of them be removed the aqueous humor will filter through at that point and appear as a small drop of fluid at a corresponding point on the free surface.

The next three lectures are devoted to a general consideration of the therapeutic measures that are to be employed in the different varieties of ophthalmia. He considers the use of strong solutions of atropine as a collyrium reprehensible, for it has not only excited conjunctivitis, but in some cases even symptoms of general poisoning, that yielded, however, to hypodermics of morphine. Atropine diminishes the intraocular pressure by increasing the tonicity of the vessels, and consequently diminishing the secretion of fluids. It diminishes also the plasticity of the aqueous humor. The midriasis is due to a paralysis of the sphincter iridis and of the ciliary muscle, an effect which is produced independently of the circulation, as is shown by the fact of its production after the eye is enucleated. M. Panas recommends very highly the hypodermic use of morphine, which not only relieves the pain better than atropine, but also exerts a sedative influence on the inflammation. He often employs pure laudanum in water and glycerine as a collyrium in preference to giving opium by the mouth. He has derived but little benefit from blisters in his practice; but in some cases has got good results from parenchymatous injections of caustic substances, such as nitrate of silver, in the temple or neck. The local application of ice he considers to be dangerous, as in debilitated persons it is apt to excite sloughing of the cornea. On the other hand, he recommends hot fomentations for several conditions of the eye.

In the five closing lectures of the course the author gives excellent descriptions of the varieties of inflammatory affections to which the cornea is subject. Phlyctenulæ are deposits of round cells beneath the conjunctival epithelium, or between the epithelium of

the cornea and Bowman's membrane, or finally in the tissue of the cornea surrounding the nerves with which they pierce Bowman's membrane. In this last case the nerves are finally destroyed, and when ulcers form they extend through Bowman's membrane. This pressure on the nerves explains the intense photophobia excited by corneal phlyctenulæ. In some cases vegetations may take the place of the primitive phlyctenulæ, a condition that is illustrated by an excellent woodcut borrowed from C. Reymond. In this cut the leucocytes are seen to be partly replaced by newly-formed connective tissue, situated between the epithelium and Bowman's membrane, and elevating the former. The corneal corpuscles and Bowman's membrane are not implicated in the inflammatory process, and have apparently undergone no change at all. The diagnostic points between vesicular and phlyctenular keratitis are clearly laid down. Horner collected the reports of thirty-one cases of vesicular keratitis, of which twenty-eight were accompanied by herpes of the lips and nose. In the treatment of this form of keratitis, atropine, hypodermics of morphine, and closing the eye have been found useful; but the most satisfactory results have been obtained from the use of constant currents of electricity. When speaking of pannus the author cites a case of Chisholm's cured, after all other means had failed, by the use of a collyrium consisting of one part essence of turpentine and two parts olive oil.

M. Panas believes that the diffuse interstitial keratitis is of scrofulous origin, attacking, however, not those who have suffered during childhood from glandular scrofula, or the ordinary forms of strumous ophthalmia, but those who have been affected with eczema, impetigo, nodes on the limbs, ulcerous sore-throat, etc. It is most common about the age of puberty, and the patients generally show signs of arrest of development, especially in the teeth, which are often rudimentary, the cutting edges of the incisors presenting the peculiar notching to which Hutchinson has called attention. He combats here Hutchinson's assertion that this form of keratitis and the notched teeth are due to hereditary syphilis. It is not likely that syphilitic manifestations would be delayed so long, and, moreover, the treatment that has proved most successful has been anti-scrofulous and not anti-syphilitic. The almost complete immunity of the cornea from disease in cases of acquired syphilis is also a strong argument against Hutchinson's theory.

The last chapter is devoted to gonorrhœal or serous iritis, and is one of the most interesting and valuable in the book. During a service of two years at the *Hôpital de Lourcine* the author saw but one case of gonorrhœa complicated by rheumatism and iritis, an excellent illustration of the great rarity of the complication in women. It is remarkable that these accidents have only occurred in women in whom the urethra was the seat of gonorrhœa, and never when the vagina or vulva alone was affected. In men it occurs especially when the gonorrhœa is acute and involves the deeper portion of the urethra, and after the prostate, bladder, and testicle are already affected. The author's theory as to the mode of its production is that the lesions of the deep urethra and bladder react on the kidney and diminish the excretion of urea and uric acid, and that the accumulation of these substances in the blood leads to inflammation of the serous membranes and of the cornea and iris. In conclusion, we will only add that the book is well got up, and written in an easy and attractive style. Though offering to the profession but little that is new or original, it bears evidence of careful study, and contains much that must be instructive both to specialists and to the profession at large.

Lectures on Orthopedic Surgery and Diseases of Joints, delivered at Bellevue Hospital Medical College during the Winter Session of 1874–1875. by Lewis A. Sayre, M.D., Professor of Orthopedic Surgery, etc., etc., etc.—New York: D. Appleton & Co., 1876, pp. 476.

In his introduction to this work, which has been long waited for and is received gladly, Prof. Sayre gives us to understand that the lectures are printed just as they were delivered, the services of a stenographer having been employed to insure accuracy and save time. Whether this is meant to challenge our admiration, forestall our criticisms, or awaken our sympathy for the overworked author, we are not told; nor would it matter much, were it not accompanied by some other statements that are more legitimate subjects of criticism. Prof. Sayre adds that they were delivered without preparation, and many of them upon cases just presented to him for the first time in the lecture room. We may be permitted to doubt if this is just what his friends had in mind when they urged him to publish his peculiar views, and we can only be thankful for the unexpected excellence of the result, the completeness of which, however, is due to the care taken to supply from private records the deficiencies of chance clinical material.

Ordinary clinical lectures are either a regular didactic course, illustrated by cases, or are discourses upon some patient as a text, in which the etiology, pathology, diagnosis, and treatment of the diseases involved are discussed. Dr. Sayre has happily combined the two, and has embraced in his twenty-nine lectures not only all or nearly all the diseases we should have expected, but also a few others whose presence is authorized only by the rather extensive meaning which the author gives to the term orthopedic. The plan of the book is the one best adapted to give the reader all the benefit that can be obtained from the author's very extensive experience, clear apprehension of the ends to be obtained, and of the mechanical and operative measures calculated to secure them. Systematic treatises may be left to those whose reading is more extensive and whose clinical experience is less, to professors of theory and practice rather than to those of clinical surgery. Although the pathology and physiology leave something to be desired, as witness the ignoring of the action of the peroneus longus in maintaining the arch of the foot, the explanation of the pain in talipes valgus, which is purely hypothetical, and indeed opposed to the only actual data which we have upon the subject as contained in the report made to the Académie de Médecine, by Prof. Gosselin, of an autopsy rendered possible by death from an intercurrent cause, and the pathology of genu valgum, which is dismissed with a word as if it were not still the subject of much controversy; still these are points of minor importance to the general practitioner so long as the hypotheses involved are considered only as "working" ones, and are calculated to fix the outlines of treatment in the mind of the reader. The treatment itself is described with such detail, and with so much attention to the principles governing it, that if, to adopt a statement of Carlyle's, the population of this country was not "forty millions of people mostly fools," the publication of this book ought to be sufficient to banish club-foot forever from among us, and many a charitable society might employ its funds very usefully in preparing and distributing a tract made up from the lectures on talipes.

The first six lectures are introductory, devoted to general considerations, definitions (we may mention in passing that the etymology of orthopedy is not the one generally accepted), deformities, and principles of treatment. Talipes is treated of in the five following, and cases are given of most of the varieties. The brilliantly successful treatment of the cases of talipes valgus in Lecture VIII. makes us regret that Dr. Sayre has not encountered or described the other variety, talipes valgus, but with the arch of the foot preserved, due likewise to excessive use of the limbs, generally in adolescents. That is a variety which cannot be attributed solely to weakness of the tibialis anticus, and in which, the arch of the foot being preserved, would probably not need artificial support. The etiology of this affection has been the subject of much controversy and has generally been placed in the paralysis of some or the excessive contraction of other muscles; and it is only within the last ten years that attention has been called, principally by Gosselin (Bull. de l' Acad. de Médecine, 1865, and Clinique Chirurgicale, 1873), to the fact that the initial symptom is pain in the medio-tarsal articulation, and that probably therefore the immediate cause is an arthritis manifesting itself subsequently by reflex contractions similar to those which are the constant accompaniments of other arthrites. The apparent wasting of the tibialis anticus, and the actual diminution in the size of the leg, which are most striking facts in Dr. Sayre's cases of flat-footed painful valgus, might be due, the first to the extension of the muscle when the foot is everted, and the second to the insufficient use of the limb. And in fact, in the description of the case given upon pages 68 and 69, there is nothing to indicate that the muscles were at fault; the only lesion shown is an arthritis, the pain of which is relieved by partial or entire immobilization of the joint in a suitable position.

Twelve lectures are then given to diseases of the joints, two to diseases and deformities of the spine, and two to anchylosis. The lack of space will not allow us to discuss them in detail. Suffice it to say that the treatment of the subjects is marked by the same vigor of style, clearness of conception, and definiteness in the object sought and means taken to attain it, that have been already mentioned.

The publishers have done their work handsomely. The paper is stout, the type large and clear, the illustrations all that could be expected, and as a rule are well chosen and likely to be useful.

Consumption in Australia. By C. E. Reeves, B.A., M.D., Author of "Heart Diseases and Aneurism in Australia;" Editor of "The Medical Record of Australia," etc., etc. J. Brooks, 232 Bourke street, East Melbourne. 1874.

Dr. Reeves has divided his monograph into ten chapters. In the first he mentions the rarity of tubercular deposit in the lungs in that country, and studies how cavities are usually formed. According to the author's observations, tubercular deposit in the lungs is the exception in Australia, although consumption is of frequent occurrence. As he has seen the disease, it has almost invariably been of inflammatory origin, and in some of the cases reported, the rapidity with which it has passed through the stages of what he calls congestion, induration, and softening, and the formation of cavities, is astonishing. For, the doctor states, pulmonary cavities may form in from ten to fourteen days in patients who are somewhat broken down and have a tendency to lung disease. Dr. Reeves speaks of congestion, as an easily recognized condition, and one from which a cavity may be formed by the breaking down of the *clot which occurs in this stage.* This certainly is quite at variance with what is commonly understood by the term congestion as used in this country. The proposed plan of treatment for the congestive state is confinement in bed in a dry room, blisters, salines with acids, beef-tea and wine freely. The doctor claims that such treatment, as a rule, aborts the attack and saves the life of the patient. In general, the conclusions arrived at in Dr. Reeves' book are interesting, chiefly because of their wide variance from what we have been led to believe occurs in similar cases in this country. For example, mention is made of congestion of the ultimate air-cells, unattended with congestion of the substance of the lungs; a fine crepitation or wheeze, said to be characteristic of congestion; that congestion may never pass into induration (Dr. Reeves' second stage) but into a cavity because of a clot being effused into the congested lung; and a peculiar nomenclature is exemplified under the term "mucous wheeze" excited in the ultimate air-cells. In the second chapter Dr. Reeves considers the influence of the seasons in producing diseases of the lungs. He reports that the coldness of the season has less to do with exciting them than the very sudden changes, perhaps from 117° or 120° F. to 50° or 60° F., with a change of the wind, accompanied with cold rains. It is also stated that lung diseases occur with greatest frequency in the hot months (December, January, and February), and that apoplexy and bleeding from the lungs are very liable to occur if the heat continues beyond the usual three days without change. In Melbourne and vicinity large quantities of water have been used for irrigating the land, and the effect has been to greatly increase the amount of moisture in the atmosphere. That increase, Dr. Reeves reports, has been attended by an increase of lung diseases, especially asthma, and has rendered the town a bad residence for consumptives. In chapter three, an analysis of 205 cases of consumption is given, and it is found that only in 72 was there a tubercular tendency. In the remaining 165 cases, exposure to cold, colonial fever (described as a low form of fever, with lung disease), and diseases of the heart were the most frequent causes. In chapters four, five, six, seven, eight, and nine, the author reports his observations upon consumption as produced by pulmonary apoplexy; by inflammatory processes; by acute and chronic gangrene; by chronic induration and tubercles; by bronchitis, pulmonary emphysema, and asthma, and by hydatids in the lungs.

It is reported that in no country, except Iceland, is hydatid disease so common as in these colonies, and that prior to 1861 it was scarcely known in the hospital. It was, however, very common at the sheep stations up in the country; and there it was produced partly by eating raw or partially cooked mutton, and drinking unboiled water from water-holes frequented by sheep, dogs, and other animals. Eating the common water-cress is also attended with danger when taken from waters frequented by these animals, and sometimes the cysts can be seen attached to the plants growing in the pools and ponds. The upper and middle lobes of the lungs are said to be more frequently affected, but the right lower lobe is especially liable to become implicated when the hydatid cyst is seated at the upper part of the liver. The tenth chapter is made up of brief references to cancer of the lung, worms in the lung (unsatisfactory note), and what the author calls bronchial polypi, or formation of membranes in the bronchial tubes, of which he has seen

three cases. In all these cases the disease was chronic, and in no case has he seen acute membranous formation in the bronchial tubes occurring in the colony, except in connection with croup. As already stated, this book is interesting because it contains a report of facts and observations made in a comparatively new field for study, and the report bears the impress of accuracy.

Correspondence.

MEDICAL MATTERS IN PARIS.

To the Editor of The Medical Record.

THE SOUFFLE OF PREGNANCY—THE INTRAVENOUS INJECTION OF CHLORAL—PRACTISING FOREIGNERS—HOTEL PHYSICIANS.

Sir:—Supposing that some account of things medical in Paris, from one actually *en rapport* with them, might not be uninteresting, I send you a few notes to-day respecting such things as seem most important at present.

The Academy of Medicine has been engaged for some time past in discussing the nature and origin of the *souffle* which is heard during pregnancy. A young physician by the name of Glénard undertook to demonstrate practically that this *souffle*, so far from being placental or uterine, has its seat in the epigastric arteries; but, under the sharp criticisms of his confrères, he made an inglorious failure and actually abandoned his theory for another—which he was equally unsuccessful in maintaining. The subject was then taken up by Bouillaud, whose elaborate researches upon vascular and cardial sounds have rendered him a recognized authority throughout the medical world, and discussed at considerable length and with much ability. According to him all vascular sounds are of two varieties, viz.: *normal* and *abnormal*. *Normal sounds* are scarcely distinguishable when arteries are subjected to no mechanical compression; and yet, careful observation detects, even under normal conditions, two muffled sounds which correspond to the dilatation and contraction of the vessels. If the slightest compression be made so as to diminish the capacity of the vessel, the friction of the blood at the point compressed immediately develops a blowing sound—*un bruit de souffle*—which can be readily distinguished, although no change has taken place in the chemical and physical character of that fluid. *Abnormal sounds* are produced under a variety of circumstances, and result from some structural alteration in the heart or the arteries, or from some modification of the fluid which it is their function to distribute. The souffle of the vessels, which has been designated according to its character the *bellows sound*, the *cooing note*, the *arterial murmur*, *le bruit du diable*, etc., and is a type of this variety of sounds, can always be intensified by an amount of pressure sufficiently great to increase the friction of the blood current against the contiguous parietes. The souffle of chloris and anæmia is due to a diminution in the density of the blood, which can be measured accurately by the *Acrometre de Bouma*, and it subsides as that fluid approaches its normal condition.

The study of these phenomena has led him to the conviction that the *souffle of pregnancy* has its seat in vessels of a certain calibre and contiguous position, which are compressed as the womb develops. The fact that this sound is isochronous with the movement of the heart of the mother and not of the child, shows that it is not developed in the placenta; while the circumstance that it is heard in connection with abdominal tumors—such as ovarian cysts—when pregnancy does not exist, is equally fatal to the theory of its uterine origin. By this argument of exclusion, as well as the additional *facts*, as he states them, of a cessation of the sound when the patient is so placed as to relieve the pressure upon the principal vessels of the pelvis, and of its increase upon one side or the other, as the uterus is made to fall in that direction, he arrives at the theory that the *souffle of pregnancy* has its seat in the *iliac arteries*.

At the next session of the Academy, Professor Depaul took the floor and entered into an elaborate argument against the views promulgated by Bouillaud. He began by admitting that his adversary was partly right in his deductions, but claimed that the explanation given by him did not cover the whole ground, and was defective in the most essential particulars. There is, he contends, a sound which has its seat in the *iliac arteries*, but it is not the true *souffle of pregnancy*. This sound, like all the *bruits* emanating from compressed arteries, is invariably *accompanied by pulsation*, while the *souffle of pregnancy has no such accompaniment*. These two soufflés, the one accompanied by pulsation and the other not accompanied by pulsation, can sometimes be heard contemporaneously, but they are essentially different from each other. Besides, the *souffle of pregnancy* is heard before any compression of the artery has taken place, and it does *not* disappear or abate when the position of the womb is changed. He denies emphatically that the *true* souffle can be heard in connection with ovarian cysts, etc., and asserts that the sound thus developed is always accompanied by pulsation. To his mind the demonstrable facts that the *bruits* of the impregnated womb are superficial, and that they can be heard over the whole area of the abdominal walls, furnish likewise very strong arguments against the position taken by Bouillaud. He thinks that the *souffle of pregnancy* depends for its production upon the peculiar anatomical conditions which this special state develops in the organ concerned in the work of reproduction, and that the phenomenon is exclusively uterine in its origin and connections, *i. e.*: is due to the mode in which the blood circulates through the parietes of the hypertrophied womb. As a means of still further sustaining this theory, he presented an apparatus which has been so constructed as to reproduce the precise anatomical circumstances upon which the *souffle of pregnancy* depends for its production. This apparatus consists in an india-rubber tube, having nearly identical dimensions with the crural artery, to which is attached a pouch capable of acting both as a drawing and as a forcing pump. During the action of the pump no sound can be detected in the tube *except when it has been compressed* at some particular point, while the souffle so developed is *invariably accompanied by pulsation*, just as in the iliac hypothesis of Bouillaud. By adjusting to the extremity of the first tube two other tubes having double its calibre and reuniting with each other subsequently, the conditions of the circulation in the uterine parietes can be fairly realized. Then, having set the pump in motion, and applied a stethoscope upon a level in the bifurcation of the tubes, a *souffle*, unaccompanied by shock, movement or pulsation, and exactly resembling that of pregnancy, can be distinctly heard. This experiment the Professor deemed *conclusive* as to the incorrectness of Bouillaud's theory and to the absolute reliability of his own, although he expressed a hope

that his *confrères* in the department of obstetrical surgery would seize upon the occasion of a Cæsarean section to auscultate the womb itself, for the purpose of subjecting the views presented by him to an *experimentum crucis*. There is great diversity of opinion here, not only in regard to the subject itself, but with reference to the advantage obtained by the respective disputants. It is generally admitted, however, that these distinguished academicians have fully sustained their well-earned reputations, and added another honorable page to the history of their illustrious and useful careers. Should the debate be continued, I shall keep you duly informed respecting its progress and result.

Anæsthesia by the intravenous injection of chloral is attracting some attention. In a paper recently addressed to the Academy of Sciences, M. Oré describes an operation performed by him, in which insensibility was induced in this way very readily and without injury to the patient. The case was that of a workman in a steam-engine factory, aged sixteen years, who, on the 4th of October last, injured his right leg about two inches below the knee, by striking it against a bar of iron. About the beginning of November the whole leg became greatly swollen, while acute and persistent pain developed itself and a well-defined tumor invaded the entire circumference of the limb. Amputation became inevitable, and it was performed by M. Laland—a solution of chloral in water having been injected into a vein contiguous to the seat of injury. Previous to the injection the patient manifested great anxiety and nervous excitement; but as soon as four *grms.* of the chloral solution had been introduced, he became perfectly tranquil, and when the quantity injected reached 6¾ *grms.* he was found to be thoroughly anæsthetic. The pulse remained at one hundred and eight and the breathing at thirty-two during the operation, whilst no reflex actions were developed. After having slept quietly for two hours, he opened his eyes, talked coherently, and then lapsed into a placid slumber which lasted for five hours. He then made a rapid recovery, and is now in perfect health. M. Sinhart, an Austrian surgeon, has also reported a case in which this method of inducing anæsthesia was successfully attempted. A young man having sustained a dislocation of the shoulder, and all efforts at reduction proving abortive, one hundred and five grains of chloral in solution were slowly thrown into a vein upon the left arm, with the result of securing complete insensibility at once. Reduction was then readily affected, and the patient, after sleeping quietly for several hours, awoke refreshed and comfortable. Chloroform was not employed, because of an idiosyncrasy which forbade it.

Although no action has been taken in regard to these cases, and it is understood that Parisian surgeons regard this plan of inducing anæsthesia as both dangerous and unnecessary, I feel confident of its value under certain exceptional circumstances.

When the ordinary anæsthetics cannot be borne, or fail to produce their effects—as occasionally occurs—or in uncontrollable cases of eclampsia, tetanus, hydrophobia, mania, and other similar morbid conditions, this additional resource of the medical art may prove a godsend, if judiciously employed.

A desperate effort is being made to prevent foreigners from practising medicine and surgery in France. Under the plea that German physicians are "squatting" upon the sacred soil of the Republic and persuading patients to test the merits of the spas of "Vaterland," it is sought to enact a new law in regard to the *authorization* of strangers, which will be almost prohibitory in its efforts. Heretofore the prerogative of according these *licenses* has appertained both to the minister of public instruction and to the medical faculty of the University, with or without an examination, according to their discretion. Should the proposition of M. Roger-Marvais be approved by the legislative body, the minister will only be left the right to dispense with attendance upon the courses of lectures required ordinarily; while the faculty will be empowered to subject each applicant to a searching examination and to grant an *authorization* or not, as it thinks proper—the penalty for assuming the title of doctor or surgeon, unless so authorized, being a fine of a thousand francs and an imprisonment of not more than six months. Under the existing system an alien has found it exceedingly difficult to secure the requisite protection because of the opposition of the faculty, and if the obstacles be further augmented by placing the whole matter virtually in the hands of that body, and of exacting a critical examination in a strange language, it will be next to impossible for another foreign physician to settle in France. Of course, the new law will not interfere with those of us who have been duly authorized under the provisions of the old one, and the tempting prize of the American *clientèle* cannot be secured until we have "gone the way of all flesh" and left the field clear to our native confrères.

Apropos of this subject I am reminded of a custom prevailing abroad against which a word of warning is appropriate. Nearly every hotel in Europe has its regular corps of doctors, who not infrequently pay for the privilege by dividing receipts with landlords, concierges and garçons. As a part of the general system of spoliation to which travelers are everywhere subjected, no effort is spared by the interested parties to *force* these individuals upon every unfortunate guest who happens to be an invalid, or even to look like one. But few of the *médecins titulaires*—as these hotel *arachnidæ* style themselves—have merit as physicians, whilst their fees are enormous and their professed ability to "speak English" is limited to the phrase in which they make the latent assertion. Unless a traveler is weary of existence and has an endless amount of money to distribute gratuitously, he should make it an invariable rule neither to consult a hotel proprietor or employé in regard to the choice of a physician, nor to submit to a prescription from any medical man introduced by such people. By applying at his *legation* or *consulate*, he can always obtain the addresses of really reliable physicians, both native and foreign, and learn into whose hands he can most safely intrust his life and his letter of credit. The better plan, however, is for him to obtain in advance from his family physician a list of such medical men in the principal cities of Europe, as he can consult with the greatest advantage.

I have just had the pleasure of meeting in Paris two members of the profession of New York, who are indeed an honor to it, and whose high character and splendid abilities are as thoroughly recognized here as they are at home. Dr. Fordyce Barker is now seeking repose and recuperation in his annual tour of the continent; while Dr. J. G. Crane, after a delightful winter in the East, has recently sailed for America. For one, I wish them length of days and still increasing honors.

Hoping to find time to write to you again and at no distant day, I must say *au revoir*.

Yours very truly and respectfully,

EDWARD WARREN, M.D.

MEDICAL CENTENNIAL AFFAIRS.

MECHANICO-THERAPEUTIC INSTITUTION OF STOCKHOLM —STEAM SUBSTITUTED FOR MUSCULAR POWER—THE VARIETY OF MACHINES FOR PASSIVE AND ACTIVE MOVEMENTS — THE CASES TO WHICH THE TREATMENT IS APPLICABLE—THE MEDICAL, SURGICAL AND THERAPEUTICAL EXHIBITS OF THE UNITED STATES—NORWEGIAN COD-LIVER OIL.

(From our Special Correspondent.)

PHILADELPHIA, Aug. 19, 1876.

AFTER leaving the Government Building, the interesting exhibits of which have been referred to in previous letters, so far as they specially attract the attention of the medical profession, we may next direct our footsteps towards the Main Building. This is the great centre for vast displays of marvels of science and skill, in several of the departments of which the medical man is legitimately interested. On our way to it, however, we pass, by a right-angled course, directly in front of the Machinery Building, the incessant clatter of which induces us to take a glance at the interior. We make but a brief visit, as the exploration of the immense aggregation of mechanical labor in motion will occupy us more fully on another occasion. Possibly the time of our visit is between four and five o'clock in the afternoon, at which hour only is exhibited in the Swedish department (Section F 2) the practical working of the Mechanico-Therapeutic Institution of Stockholm. The apparatus is placed along the extreme northern wall of the building, not far from the entrance. To the casual observer it is a rather odd-looking collection of mechanical appliances. On inquiry, however, we learn that its objects are the preservation and restoration of health through systematic exercise of the muscles, and through various mechanical operations on the body. The institution was established in 1865 by Dr. G. Zander, who was recently in Philadelphia.

In ordinary gymnastic health institutes, the patient is treated by an operator or gymnast, who makes both active and passive movements, as they are called, according as the patient himself is active or passive. Dr. Zander, however, substitutes machinery worked by steam for the muscular power otherwise required, which has the advantage of facility of steady regulation and of graduated increase of the force to be employed. The machines constructed are adapted to be worked by most of the various sets of muscles. The apparatus of the institution consists of sixty-seven different machines, although only twelve of these are placed in the Swedish department for exhibition. With these sixty-seven forms of apparatus, forty-six movements are practicable. Seventeen of the machines are for active arm movements, eighteen for active leg movements, nine for active trunk movements, and twenty-three for passive movements. The latter are effected by a steam engine of five horse-power, and include rubbing, shaking, etc., while the patient is in repose. With these machines are accomplished twelve distinct movements of flexion, extension, adduction, abduction, etc., of arms, hands and fingers; fourteen similar movements of the legs and feet at the different joints; flexion, extension and twisting of the trunk in lying, sitting and standing positions, eight movements; and twelve movements of shaking, chopping or hammering, tapping, kneading, rubbing, rolling and swinging, performed by the operator. Ladies and gentlemen patronize the institution, not only as patients, but for the purpose of normally developing their muscular systems. Every one receives a prescription enumerating the movements to be performed, twelve of which are generally accomplished daily, the movements being changed, wholly or partially, after the twelfth day. This methodical treatment is said to be beneficial in chronic cardiac cases, and is also employed with advantage in constipation, diseases of the joints, rheumatism, spinal curvature, etc., etc. The shaking movement is especially commended by Dr. Zander for its salutary effect on organs in the vicinity of the region thus agitated; tired muscles seem to recover themselves to a great extent; pain is subdued; the walls of the bladder and rectum contract from the shaking of the sacral bone; shaking of the chest facilitates expectoration in catarrh; the same motion of the back relieves nervous palpitation, etc. These effects seem possible and plausible, and in the hands of a sensible operator, who is no mere enthusiast and understands when not to apply this powerful apparatus, are doubtless beneficial in many cases in which medication by drugs might be too slow in action or absolutely powerless for good.

Crossing now the open plaza which lies between Machinery Hall and the Main Building, we enter the portals of the latter, and must pass more than half its entire length before reaching the groups of exhibits in the United States Department, should we wish, as physicians, to commence our examination with that beautiful and extensive display. One might imagine that by the time a survey was made of the various classes of exhibits embraced in each country under the head of Medicine, Surgery and Prothesis, there would be but little left to interest the physician, looking at the subject from a merely medical aspect. Such, however, is very far from being the case. This trio of congenerous exhibits embraces: 1. Medicines; officinal (in any authoritative pharmacopœia), articles of the materia medica; preparations, unofficinal. 2. Dietetic preparations, as beef extract and other articles intended especially for the sick. 3. Pharmaceutical apparatus. 4. Instruments for physical diagnosis, clinical thermometers, stethoscopes, ophthalmoscopes, etc., except clinical microscopes, which are included in another class (optical and thermotic instruments and apparatus). 5. Surgical instruments and appliances, with dressings, apparatus for deformities, prothesis, obstetrical instruments. 6. Dental instruments and appliances. 7. Vehicles and appliances for the transportation of the sick and wounded, during peace and war, on shore or at sea. In addition to all these interesting subjects, we find scattered through the exhibits from all parts of the world many semi-medical or at least medico-popular items, such as mineral and other waters, chemicals, instruments of science and philosophy, matters relating to the physical and social condition of man, etc. Machinery and Agricultural Buildings also contain numerous exhibits that will challenge professional attention, the latter especially, such as are related to his aliments, solid and fluid.

It may be well to state, at the outset, that the whole magnificent and vast display in the Main Building is arranged under three general heads or departments: 1. Mining and Metallurgy. 2. Manufactures. 3. Education and Science. Under the second head are included not only the groups previously alluded to under the class of Medicine, Surgery, etc., but also chemicals and pharmaceutical preparations, which, as already stated, do not strictly belong to the class just mentioned. We do not propose, however, to follow this plan of division through the minutiæ of the whole exhibition. A much more interesting and instructive course will be to study each country collectively through all its

medical exhibits, rather than to take an arbitrary classification, and tediously trace it through country after country to the point of thorough exhaustion of the subject, and possibly of the reader also.

Beginning, therefore, our tour through the building at the main or western entrance, and momentarily passing Italy, which first confronts us and deserves a more extended notice than we can to-day give it, we arrive at Norway. The chemical display here is limited almost wholly to an exhibition of cod-liver oil by Peter Möller of Christiania, J. Borthen and C. Jordan of Trondhjem, Lauritz Devold and the Aalesunds Medicintran Co. The long tubes in Möller's exhibit, filled with oil, look like the pipes of a church organ. Borthen's oil is very light and transparent, and all of them are almost tempting enough in appearance for steady imbibition by the thirsty. Möller's and Jordan's seem to have secured the medals in previous exhibitions. The judges of this Congress will, of course, take copious draughts of each before awarding the palm for superiority. H. S. Ditten of Christiania, Court Apothecary and Proprietor of the State Hospital Dispensary at that place, exhibits "druggists' medicine chests for travelers," being small, cheaply made, unattractive, shallow tin boxes, such as children in this country use for slate pencils, sponges, etc., containing eight or ten minute vials, in which are remedies against colic, coughs, hemorrhages, etc., for all the emergencies and ills which travelers' flesh is heir to. The costive are also invited to help themselves to sample boxes of aperient pills manufactured behind his counter, but very few of the visitors seem willing to make so public a confession of their shortcomings. In the department of education and science, Drs. Danielsen, Physician-in-chief to the Elephantiasis Hospital at Bergen, and Prof. Boeck of Christiania, jointly contribute a treatise on the skin and another on elephantiasis; but otherwise, with the exception of a zoo-geographical map of Norway, containing a complete list of the vertebrate animals of the country, by Robert Collett, Assistant of the Zoological Museum at Christiania, there is nothing else on exhibition of exclusive interest to the medical profession. We might, indeed, except the governmental quarto volume, one of a general series of official documents on three heterogenous subjects—the sanitary condition of Norway, elephantiasis, and insane asylums. The treatise on elephantiasis, by the two gentlemen already referred to, was also published at the expense of the government.

R. J. D.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from August 20th to August 26th, 1876.

Alexander, C. T., Surgeon. Granted leave of absence for 20 days. S. O. 173, A. G. O., Aug. 22, '76.

White, C. B., Surgeon. Granted leave of absence for 20 days. S. O. 174, A. G. O., Aug. 23, '76.

Price, C. E., Asst. Surgeon. To continue on duty with 4th Artillery, at Cheyenne, Wyo. T. S. O. 115, Div. of the Pacific, Aug. 17, '76.

Hoff, A. H., Asst. Surgeon. Died at Germantown, Pa., on Aug. 19, '76.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending August 26, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Aug. 19.....	0	17	14	2	2	29	3
" 26.....	0	21	20	2	2	26	0

Newspaper Notoriety.—We have been somewhat surprised to witness the daily parade of the so-called opinions of respected gentlemen in our profession in connection with the condition of a distinguished financier in this city, upon whom they have been in attendance. Of course they are not accountable for anything that is said concerning their patient, for if they were we should be ashamed of them. It is unfortunate, however, that the newspaper reporters not only have the opportunities for manufacturing professional opinion, but the privilege of degrading the position of a medical attendant to that of a hired nurse. Altogether the profession has in no manner been elevated by the unfortunate notoriety which has been thrust upon the doings and sayings of the gentlemen to whom we refer. Again we say that we cannot believe that they are in any way accountable for the unprofessional aspect of their case, and consequently tender them our sympathy.

The Model City of Health, proposed by Dr. Richardson, of London, is about to be tried practically. A site has been secured on the coast of Sussex, England, where the city will be laid out.

Flea Bites and Phlebitis.—An undertaker, on examining the death certificate of a man who had died of phlebitis, the result of the sting of an insect, did not see why flea bites could not be spelled in the old-fashioned way. The same individual ridicules the Latin rendering of very coarse veins, and has become an earnest advocate for good preliminary education among physicians.

International Medical Congress.—The Royal Medical and Chirurgical Society of London has appointed as delegates Dr. Charles John Hare, F.R.C.P.; Dr. Robert Barnes, Lecturer on Midwifery, St. George's Hospital; and Mr. R. Brudenell Carter, Prof. of Surgery, Royal College of Surgeons.

Bellevue Hospital.—At the meeting of the Board of Commissioners of Public Charities and Correction, held August 9, 1876, Dr. John G. Curtis was appointed Visiting Surgeon, *vice* Doctor Henry B. Sands, resigned, and Dr. Thomas T. Sabine appointed Visiting Surgeon, *vice* Doctor Thomas M. Markoe, resigned.

Poisonous Mushrooms.—Prof. Schiff, of Florence, has demonstrated that the non-edible mushrooms have a common poison, muscarina, and that its effects are counteracted either by atropine or daturine. Italian apothecaries now keep these alkaloids in the rural districts where the consumption of the non-edible fungi is apt to occur.

Original Communications.

A REPORT OF SIX CASES OF MIDDLE EAR DISEASE, INDUCED BY THE USE OF THE NASAL DOUCHE IN TREATING NASO-PHARYNGEAL CATARRH.

By WM. SHAW BOWEN, M.D.,

OPHTHALMIC AND AURAL SURGEON TO THE HARTFORD HOSPITAL.

Since the Weber, or, as more commonly called, the Thudichum douche has been brought into use in this country as a means of treating catarrh of the nasal passages and of the pharynx, it has become a favorite of a large portion of the profession, and of the laity generally. In a climate especially predisposing to this affection, where a large proportion of the people are suffering to a greater or lesser extent from the oftentimes disgusting and annoying malady, any simple, efficacious, and apparently safe appliance, like the douche, is certain of appreciation, and inspires general confidence; and this confidence is increased when eminent scientific authority pronounces in its favor. The difficulties attending a complete cure, and oftentimes any permanent modification of the affection, even by specialists, are so great that the charlatan finds an ever teeming field for practice in this direction. That the use of the Weber douche is one of the best methods of cleansing the nasal passages and superior portion of the pharynx there is no doubt; and simple solutions, as of chloride of sodium, and of permanganate of potassa, sometimes produce remarkably beneficial results when introduced to the Schneiderian membrane by this simple instrument, so easy of manipulation as to be used by a child, after a little instruction. Under different names, and accompanied by a host of patented nostrums known as "Catarrh Cures," it is found in every apothecary's store, and is more generally used than any other means of treating what may be properly termed the national disease. Of late, however, the attention of certain aural surgeons has been directed to occasional injurious effects produced on the Eustachian tubes and the tympanic cavities attending its use, and Prof. St. John Roosa, of New York, first called attention to cases of acute suppuration of the middle ear, undoubtedly produced by a current of fluid thrown by the douche into the Eustachian tubes and to the delicate parts beyond. Dr. Roosa's statement produced some discussion, and not a few scientific men doubted the conclusions and defended the instrument. Dr. Roosa finally published, in the *Archives of Ophthalmology and Otology*, a detailed report of sixteen cases occurring in his own, and in the practice of other reliable observers, which settled the question in the minds of otologists generally. Dr. Pardee, of New York, has published a report of cases of ear trouble directly traceable to the use of the douche; and recently Dr. Henry L Shaw, of the Massachusetts Eye and Ear Infirmary, has given his experience in eighteen cases, not all of them due, however, to the use of the douche, three being caused by the posterior nares syringe, a hitherto safely regarded instrument; and one case from snuffing salt and water from the hand through the nostrils.

The late Prof. Hinton, of London, mentions a case, in his *Questions of Aural Surgery*, in which the douche was used by "a most careful and competent physician." "The patient was a clergyman, aged seventy, and severe inflammation was set up in each ear. The liquid had a fall of five feet." He also observes that possibly the danger is greater in advanced age, owing to wasting of the tissues.

The writer has recorded six cases, occurring in his own practice, where there can be no doubt that the ear mischief was entirely due to the forcible entrance of fluids thrown by the douche to cleanse the nasal passages and pharynx. In five of the cases the pain and disturbance about the ear was observed immediately after the fluid was passed into the nostril, and in the remaining case the connection was so close as to justify a positive opinion as to the cause of the serious suppurative inflammation that followed.

The structure of the lining mucous membrane of the Eustachian tubes is such as to be antagonistic to the passage of fluids from the pharynx to the cavity of the tympanum. The ciliated epithelium moves downwards towards the pharyngeal openings, and as the walls of the tubes normally are in apposition in the greater portion of their length, except in connection with the act of swallowing, there is requisite a certain amount of force to inject a fluid to the cavities of the middle ear behind the drumhead. The action of the douche depends upon the physiological action of the muscles of the palate, which close the lower part of the pharynx, and prevent the passage downwards of the medicating liquid, which, entering the nostril on one side, filling the nasal cavity and upper part of the pharynx, escapes through the opposite nostril. If there is undue potency of the tubes, the current may be forced up against the cilia, and possibly reach the tympanic cavities, although inflammation may result without its going so far, but on account of the extension of tubal irritation. The more frequent source of danger, however, is the act of deglutition, which may occur while the pharynx above the palate is filled. The mouths of the Eustachian tubes simultaneously open, and the hydrostatic action occurs along their course. That this occurs frequently without any injurious results following I am convinced, but the danger always exists. Fluids thrown into the tympanum cavities may be retained until absorbed. According to Mr. Yule's experiments,* the resistance of the tubes is greater from above downwards, and "a warm alkaline solution thrown downwards through an imperforate drumhead required force sufficient to raise a column of mercury four inches." Whatever is forced upwards by pressure, probably remains in the great part until absorption takes place. The tendency of pus in the tympanic cavity to find its way outwards through the drumhead is well known, and in acute catarrh the inflammatory products are usually relieved in this way, instead of finding an exit through the Eustachian tubes into the pharynx. When the current of medicated fluid from the douche is passing through the nostril into the pharynx, the act of deglutition is to be strenuously avoided, and this precaution is insisted upon by the advocates of the douche as a means of treating catarrh, it being asserted that with proper care the mishap is impossible. Notwithstanding the utmost attention, occasionally a portion of the fluid may escape into the throat below the palate, and swallowing involuntarily takes place. Of course, the risk of entrance of some of the solution into the open orifice of the tubes is very great, and upon the distance penetrated depends the risk of resulting ear disturbance. When this risk is fully considered, and with the grave consequences of suppurative inflammation in view, it is certainly true

* "Journal of Anatomy and Physiology," November, 1873.

that the suggestions already made by observers in the field of otology are of the utmost importance; and that the apparently simple and useful nasal douche is really a dangerous instrument, the use of which should be discarded, except under conditional circumstances. Careful observers, physicians in large general practice, have stated that there has been within a few years an increased number of cases of "running from the ear," and of ear-ache, in adults, and I have no doubt that, if reliable statistics could be collected, it would be demonstrated that the use of the nasal douche has actually increased the proportion of ear disease to an appreciable extent.

It would be exceedingly difficult to demonstrate that chronic otitis media, with general sclerosis of the parts, one of the most formidable of all aural diseases, may be excited in the same way, yet I believe that such is the case, and that irritation of the tubes may ultimately extend, and finally terminate in this affection. Dr. Shaw, of Boston, takes this view, and it is certainly rational and scientific. Catarrhal affections of the nose and pharynx can be treated efficaciously in other ways, equally simple, as by the atomizer; and the use of the douche should, generally, be discountenanced by medical men. The following cases illustrate the dangers above mentioned that may occur, notwithstanding in most of the cases the patients were aware that it was highly objectionable to swallow while the fluid was in circulation, for reasons aside from the disagreeable taste of the solution used.

November 9, 1875.—Mr. R., æt. fifty-four. Sharp pain in both ears following use of a solution called "Sanford's Catarrh Cure," injected from a tin cup on a shelf, through a rubber tube placed in one nostril. Pain and noises in ear relieved by treatment, without suppuration becoming established. The following week the apparatus was again used. Violent pain followed immediately, and, after a sleepless night, discharge from the left meatus of purulent matter. An examination showed general inflammation, with a ragged perforation of the drumhead in the inferior quadrant.

December 10, 1875.—Mr. R., æt. twenty-nine. Consumptive. Has used a salt and water injection through the douche three times a day for ozæna. While using it his wife "made me laugh," and a "rush into both ears like a trip-hammer" was felt. Sharp pain followed; the next morning it was agonizing, and there was tenderness behind the left auricle. The drumhead was incised on this side, setting free the accumulated secretion, and relief was obtained. Patient passed from observation, but I am informed that suppuration from the left ear continued until his death, last May, from pulmonary disease.

December 27, 1875.—Mr. B., æt. forty-eight. A strong, hearty man, of active occupation and habits. Six weeks before he came under observation, had pain in both ears, following the use of "Dr. Manning's Catarrh Specific," injected by a douche with fall of two feet. "Dr." Manning's catarrh remedy evidently contains carbolic acid and glycerine, apparently in safe proportions. The ear-ache was checked by hot water, and leeches to the tragus before suppuration became established in the right ear, but there was profuse discharge from the left meatus, coming from the middle ear through an opening in the drumhead. Passed out of observation because he "did not believe that a discharge from the ear should be checked." I am informed that the suppuration, with accompanying deafness, has continued until the present time.

Miss S., æt. nineteen. Chlorotic. Has had ozæna for many years. Has been treated in different ways, and for a month previous has used a Thudichum douche with a fall of about three feet. Salt and water and a solution of tannin were used alternately, morning and evening, with great benefit, so far as the nasal inflammation was concerned. October 4th, "took a fresh cold," and used the douche a number of times during the day, passing a pint of the solution through the nostrils at once. Severe pain in both ears followed the involuntary act of deglutition, occurring the last use of the douche, and a yellow discharge from both external canals appeared in the course of the next day. This patient came to me for advice with subacute otitis media, with profuse granulations sprouting from the orifice in the left drumhead; and a small polypus filled the perforation of the right. A cure was effected after tedious treatment.

Mrs. R., æt. thirty-eight. Mother of eleven children and in delicate health. Used the douche occasionally for "colds in the head." The day previous to first visit "noticed a strange feeling in both ears while cleansing the nose and throat with salt and water." The douche was on a shelf "about three feet over the head." A "jarring noise," gradually increasing, and finally intense pain, brought her to visiting her physician, and I saw the case in consultation. Prompt treatment prevented suppuration, but there were marked symptoms of congestion, injected vessels in the line of the handle of the malleus for twelve days.

Mr. S., æt. nineteen. Chronic catarrh since childhood. Has used one of Dr. Clarke's ear douches for injecting salt and water in the nostrils at intervals for several months. Ten days ago used the douche in the morning as usual, without any untoward symptoms. Shortly afterwards "felt something in the ears," and on making efforts to relieve by the Valsalvian method, tasted salt in the mouth. The relief gained was temporary, and toward night had a "regular ear-ache." This was the commencement of a severe attack of otitis media purulenta, and accompanying impairment of hearing, which, however, yielded to treatment.

HARTFORD, CONN., July, 1876.

THERMOMETRIC OBSERVATIONS PERTAINING TO THE EFFECT OF ALCOHOL ON ANIMAL TEMPERATURE.

BY A. D. FELTON, M.D.,

SYRACUSE, N. Y.

ACCORDING to Liebig and his adherents, alcohol increases animal temperature. If this be true, then, irrespective of other qualities it may possess, alcohol is indicated when the temperature is below normal, as in collapse, and is contra-indicated in fevers; whereas, exactly the reverse of the above is true, if it reduces the temperature, according to the more recently accepted theory of Richardson.

We commenced the study of alcohol feeling a little as we fancy Æsop the hermit did at the audacity of the half-frozen wanderer who could blow both hot and cold; but, after personal investigation, we are disposed to believe both theories are correct; that alcohol is double-headed, and does increase and diminish temperature. The following is a summary of sixty-two hypodermic injections of alcohol, and two hundred and thirty thermometric observations made upon the cat, the result of each day's experiments perfectly agreeing. But we fully appreciate that our investigations are too meagre to allow of definite conclusions, there are so many queries constantly arising which are

susceptible of different solutions, depending upon the size of the doses, frequency of repetition, continuance of the alcoholic diet, time of the thermometric observations, etc.; so that to reach satisfactory deductions is no easy matter. Comparing each day's experiments, we find the greatest change of temperature takes place in about thirty-five or forty minutes after the first hypodermic injection of alcohol, usually three minutes. In the normal cat this change is invariably a reduction of about five eighths of a degree. At the expiration of about * fifty minutes, sometimes later, the temperature usually begins to rise, and at the end of an hour it has recovered nearly half the ground lost, as one-fourth of a degree. Now repeating the injections, and increasing the quantity to four minims, in thirty-five minutes the temperature falls about half as much as after the first injection. At the expiration of the second hour it has recovered the quarter of a degree lost. Now inject five minims of alcohol, and in about forty minutes the temperature falls about half as much as before, or an eighth of a degree; but at the end of the third hour it has risen to the starting-point of the morning, as to normal. We now give an injection of six minims, and in about forty minutes there is a slight fall of temperature; but at the expiration of the fourth hour it has risen a quarter of a degree above normal. Continuing the injections, we commence the sixth hour three-eighths of a degree above normal; but since the increase of temperature continues, until checked by the alcohol, in thirty-five minutes it registers five-eighths above normal; at the expiration of forty minutes it has fallen one-fourth of a degree, plainly showing the effect of the alcohol; but at the close of the sixth hour it again reaches five-eighths above normal.

At another time we gave five-minim doses every hour, and the effect was more decided and prolonged, the temperature not reaching the lowest point until about fifty minutes after the injection, and remaining below normal an hour longer than when using smaller graduated doses; but when it passed the normal, the increase as in the other cases was proportionate to the quantity administered.

On the first days of observation, when we administered the alcohol without much regard for regularity, the temperature rose above normal more quickly, and no reasonable dose would materially effect a reduction; yet the effort at reduction was usually manifest. Although an elevated temperature as the result of alcohol would yield very little to repeated injections, yet the subsequent rise of temperature following the administration of alcohol was always marked. Again we commenced with three minims, repeated in an hour, increasing each dose one minim, and lessening the time between each injection five minutes, until we were administering eight minims every forty-five minutes, the quantity and time thereafter remaining the same; and with an equal daily quantity of alcohol, by thus anticipating the rise of temperature, we were able to keep it in subjection for an hour or two longer than by any other method we practised, but the subsequent elevation took place precisely as in the other experiments. With all our experiments, in about two hours after the last injection the temperature would rise from three-fourths to one and a half degrees above normal, depending upon the quantity of alcohol administered; the larger the total daily quantity the higher the temperature. We estimated that it required from six to ten hours after the discontinuance of the alcohol for the temperature to fall to normal, but the following four to six days showed a reaction in which the temperature fell below normal, in one instance a whole degree on the fourth day.

A cat under observation contracted a sore eye, as the result of which her temperature was increased from three-eighths to one and five-eighths degree. In from forty to forty-five minutes after the first injection of alcohol, her temperature had fallen from three-fourths to one and a quarter degree, at one time falling half a degree below normal, and again to within a quarter or three-eighths of normal; but in an hour it commenced to rise, although the injections were repeated. On three of the four days of fever observations, the temperature did not rise to within less than an eighth of a degree of the morning starting point, and by repeating the injections it remained about half a degree under the fever point of the morning. On the afternoon of the remaining day, the fever rose half a degree above the morning temperature. On each day the immediate effect of the alcohol was a reduction, followed by a rise of temperature, but the latter was not as rapid or marked as in the experiments on the normal animal. Of course we cannot say the temperature would not have fallen without the alcohol; but we are not disposed to believe it a mere coincidence, that on each day it should fall in forty or fifty minutes after the injection. Neither can we say the fever would have increased without the alcohol—we are of the opinion it would not; while it appeared to have an immediate effect in reducing the temperature, we noticed that the increase, following the diminution, was not as rapid or great as when there was no fever present. A cat suffering from poison, for a few days had a temperature of one and a fourth to one and three-eighths degree below normal. In twenty minutes after an injection of five minims of alcohol the temperature rose about half a degree, in an hour a whole degree. In fifteen minutes more it had fallen about a half a degree, when a repetition of the alcohol caused it to rise, and thus by repeating the dose the temperature could be raised to normal, and ultimately a little above, only to drop on discontinuing the injections; but after the second dose the temperature would remain nearly at normal, with intervals of two or three hours between the doses, and we inferred a fever would result if the alcohol was repeated too frequently. In a case of collapse occurring in practice, the treatment being hypodermic injections of alcohol, the carefully noted thermometric observations perfectly agree with the above experiments. In this case the temperature fell ten and a half degrees in twenty-four hours, four and a half degrees below normal, the patient apparently being moribund. In two hours' time we administered four injections, and afterwards frequently gave a few drops of whiskey by the mouth. We are now inclined to believe the alcohol was repeated too frequently, and was instrumental in causing, or at least in increasing, the high fever which followed in two or three days.

In our experiments, the vaginal temperature was taken with the bulb of the thermometer well inclosed. The normal temperature was 101½ F., and each injection consisted of from two to eight minims of alcohol proof spirits, largely diluted; but we usually commenced with three minims, as we found that less than that quantity possessed little or no depressing power over the temperature. After the first dose it was necessary to increase the quantity in order to produce the same effect, but it never occasioned intoxication. One or two minims would not lower the temperature

* We are forced to make frequent use of the word *about*, for in such experiments an *exact* correspondence of time could not be expected.

unless it was the first dose, and not usually then, but a slight subsequent elevation of temperature occurred sooner than when it first caused a reduction.

In conclusion, alcohol first reduces the temperature of the normal animal, then raises it above normal. When repeated, its immediate tendency is to check an increase of temperature, but after a little, a rise usually follows, and is proportionate to the amount of alcohol injected. In the feverish condition it temporarily diminishes the temperature, and is disposed to prevent an increase of fever. In collapse it does not further lower, but raises the temperature to normal, and beyond, if too frequently repeated; therefore, we would be governed by the thermometer in the administration of alcohol in such cases. In brief, the tendency of alcohol is to first depress, and then elevate, the previously normal temperature, and to correct an abnormal temperature.

COCA AND ITS ALKALOID COCAIN.

By ISAAC OTT, M.D.,

DEMONSTRATOR OF PHYSIOLOGY, UNIVERSITY OF PENNSYLVANIA.

Some time ago, in a pamphlet* published for private distribution, I detailed some experiments made with this substance. As the action of coca has lately been a subject of remark in the medical journals, I send you the following:

The experiments were made with coca leaves from Schering of Berlin, and cocain obtained from Trommsdorff. The succeeding experiment was made upon myself.

After a small dinner, with a cup of coffee, I masticated coca, swallowing leaves and saliva. First, increased salivation; warmth of buccal mucous membrane, which extended to stomach; the taste of leaves at first rather bitterish, but at length sweetish; numbness of buccal mucous membrane; the heat of the skin seemed increased, and the physical forces seemed greater. In thirty-five minutes a slight disposition to move about. In two hours and a half ten grammes eaten, and some intoxication present; co-ordination somewhat impaired; muscular strength seemed weakened; a sort of paresis; disposition to be left alone; sitting; going into reverie, with frontal pain; tinnitus aurium; ears feel as if I had been blowing a wind instrument; pupil slightly dilated. In three hours, somnolency; frontal pain and fulness about ears continues; disposition to close eyelids; general numbness of whole body. In three hours and twenty-five minutes 29 cubic centimetres of water taken; mouth is hot and dry; nervous urine passed. In three hours and forty-five minutes, general numbness; reveries; holding of respiration, as in deep thought. In four hours I have taken 19½ grammes of coca; the remaining were chewed, and the saliva only swallowed; somnolency disappeared; mind bright and clear. In five hours, I have taken 28 grammes; pupil more dilated; slight supper taken, no coffee, but water; the supper seemed to bring down the action of the coca. In seven hours and forty minutes, the coca being gradually chewed, frontal headache returns with fulness of ears. In eight hours and forty-five minutes 60 grammes of coca have been chewed; loquacity; eyes brilliant and moist; at length speech becomes thick; am in high spirits and full of hopes. In ten hours and fifteen minutes frontal headache again coming on; drowsiness; then retire, but am unable to sleep. After a few hours, deep sleep comes on, but is disturbed and not prolonged. Arise at 7.30 A.M.; face pale; eyes seem dry; lips bluish; take a light breakfast without coffee. Since 10.30 P.M. last night have had frontal pain; sensation in mouth still blunted. At dinner took three cups of coffee, which relieved me, but headache came on during the afternoon; taste blunted during the whole day.

Coca on man increases the pulse, elevates the temperature, dilates the pupil, and decreases the amount of water used and chloride of sodium excreted by the kidneys.

Observations made with cocain on lower animals gave the following results:

In small and large doses it causes loss of co-ordination and decrease of motor power; it does not paralyze the anterior columns of the spinal cord.

In small doses it increases the sensibility, which causes general convulsions upon irritation. Large doses abolish the functions of the posterior columns and sensory nerves.

When gradually introduced into the system, it kills by stoppage of respiration. It reduces the pulse and arterial tension momentarily and afterwards increases them. This effect is a result of an action on the heart and vaso-motor centre. It does not paralyze either the pneumogastrics or the vaso-motor centre situated in the brain.

It first excites and then paralyzes the centres of respiration.

The pupil is dilated, and the temperature after a depression rises.

On striated muscles the course of contraction, as registered by Marey's comparative myograph, is similar to that with veratria.

If coca and cocain are compared with coffee and caffein in their physiological action, the result will be that they are very similar, and that coca and its alkaloid should be classed among the excitants, of which coffee is the chief example.

Easton, Pa.

* Cocain, Veratria, and Gelseminum. Lindsay & Blakiston. 1871.

CASE OF NECROSIS OF INTERNAL EAR, FROM CHRONIC SUPPURATION OF MIDDLE EAR.

TREATED AT DR. AGNEW'S CLINIC, MANHATTAN EYE AND EAR HOSPITAL, NEW YORK.

Reported by J. OSCROFT TANSLEY, M.D.,

NEW YORK.

Monday, May 1, 1876.—Thomas H——, sixteen years old. Has had otitis media suppurativa chronica since five years of age.

Cause, at that time, supposed to be an attack of measles. Has been treated occasionally during this time, but with little success.

The reason for this lack of success seems to have been a want of due appreciation of its seriousness, and, of course, the accompanying carelessness in attending to the affection, rather than any peculiar unmanageableness of the disease.

The discharge continued occasionally in varying amounts, until about five years ago, when, after going in sea-bathing, a severe and acute pain was experienced upon the left side of the head, and accompanied by a swelling behind the left ear. The swelling was poulticed, and in a short time broke and discharged considerable matter. Since that time it

has never healed, but has continued to discharge more or less.

Thus it would seem that both ears have suppurated for ten or eleven years, and the openings in mastoid region have existed and suppurated for five years. About one year ago the mouth became drawn to one side, and he was unable to close the left eye. Considerable pain has been felt in the head and side of the head, and also behind the sterno-cleido-mastoideus muscle, also a dizzy feeling occasionally; but I was unable to gain any information as to the character of the pains, whether dull, heavy, shooting, or lancinating, or any peculiarity in the dizziness.

Present appearance: facial paralysis on left side complete; unable to move or use the muscles supplied by left portio dura at all.

Both ears running and full of pus; left ear also has a hard substance like bone, presenting at external meatus.

Left processus mastoideus tender and in an ulcerous condition, and showing two points at which pus is oozing. Hearing distances: Right, $\frac{4}{5}$; left, $\frac{0}{5}$.

Treatment.—Right ear was syringed and a large perforation found in membrana tympani, and appearing as usual in otitis media suppurativa chronica of such long standing, but no polypi or granulations. Hearing distance much improved.

Left ear syringed externally to clear away the pus, and then seizing the presenting bony mass with a pair of polypus forceps, and by rocking slightly, and at the same time using traction, it was extracted. This mass of bone and pus measured about three-eighths inch in diameter and three-fourths inch in length; and upon being macerated was found to consist of the bones of the internal ear—that is, the cochlea and semicircular canals.

The ear was carefully syringed out, and water was seen to ooze out of the two openings behind the ear on the processus mastoideus.

The probe was not used to investigate the sinuses. Upon examination now, after having syringed the ear, quite a cavity was seen, and lined seemingly with healthy granulating matter.

The patient was seen by Drs. Agnew and Webster, the former advising free incisions over the mastoid and opening of the sinuses; but finally it was decided to let the patient wait for a day or two, or until more positive indications for cutting should be manifest, as pain, etc.

Eustachian tubes were permeable to Politzer's method of inflation.

An instillation of argt. nit. gr. x. ad ℥ i. was used, and a solution of zinci sulphas, gr. iv. ad ℥ i., was given to be used in right ear only, and three times daily.

Advised to syringe both ears several times a day with warm water.

Wednesday, May 3.—Patient came and professed to be greatly relieved, and certainly looked much better. Says his ears have not run so profusely since he has been treated. Probe was passed into the upper opening on mastoid, and was found to pass directly into the external canal, opening into it about one-half inch from external meatus. Consulting with Drs. Webster and Pomeroy, it was thought advisable to still further postpone the cutting of the tissues over mastoid, because of the marked improvement without cutting. Syringing and instillation same as Monday, and same treatment advised as then.

Friday, May 5.—Patient presents a much improved appearance; has had no pain of any kind, or any unpleasant feelings. The cavity previously noticed seems to be filling up with granulation matter, but having a healthy appearance.

Monday, May 8.—Says he is feeling better every day, and has no trouble with his ears, and they run but little.

Wednesday, May 10.—Still improving; has no running from ears, and although the ears have not been cleansed since early this morning, I can find no pus in any part of either ear. In left ear there seems to be a new membrana tympani forming.

Friday, May 12.—A more careful examination of left ear to-day shows the membrane noticed on Thursday to be thin and continuous with the epidermis of the external ear, more cicatricial than membranous in character, and laying upon the inner wall of middle ear, leaving no cavity in the posterior portion; but in the anterior part it is deflected from the inner wall of middle ear over the opening of Eustachian tube to the anterior wall of external canal, leaving here a small cavity. In the central part of anterior portion there is a perforation, or perhaps, better to say, an unformed part through which air may be made to pass by the Valsalvian method.

Very little suppuration in either ear. No pains or bad feelings. Same treatment continued.

July 14, 1876.—Since last date the patient has presented himself regularly at clinic, and has had no unfavorable symptom. Left ear seems to have entirely ceased to suppurate, and to persons not skilled and experienced in examination of ears, seems like an ordinary membrana tympani with a small perforation anteriorly; but it can be easily demonstrated by Seigle's tympanoscope that there is no tympanic cavity, and this seeming membrane has more of a cicatricial appearance and character.

It is hardly necessary for me to say that the small bones of middle ear, as malleus, etc., are not present.

Facial paralysis is still present, remaining unchanged from his first appearance, notwithstanding the fact that he has received the best of treatment for this paralysis in the neurological department of Manhattan Hospital, under the direction of Dr. Seguin.

There is, in all probability, a solution of continuity of the left portio dura in its passage through the petrous bone.

The openings in mastoid region have entirely healed.

Progress of Medical Science.

Treatment of certain Forms of Acne.—Dr. Chantry claims that he has obtained gratifying success in the treatment of rebellious cases of acne of the tuberculous and hypertrophic variety, by the use of iodide of sulphur internally in combination with Hardy's lotion externally. He gives at first one, then two or three of the following pills: ℞. Sulphur. iodide, gr. ss.; Extr. solani dulcamarae, gr. ij. M. He employs also the following lotion: ℞. Aquae, ℥ iijss.; Tr. benzoin, ℥ i.; Potass. sulphuret, ℥ i. M. A teaspoonful in lukewarm water, to be used morning and evening. (Hardy.) If this lotion causes too much irritation, it must be replaced by lotions of filtered bran-water. In some cases the iodide of sulphur causes gastralgia, and its use must be discontinued; but if this does not occur, a noticeable amelioration of the affection is found in about twelve to twenty days

The hard, purple elevations which surround the tubercles slowly soften and become less swollen, the usual desquamation of the epidermis takes place, and soon nothing remains but a diffuse, pale congestion, which disappears slowly, and is often succeeded by triangular cicatrices.

In a case of acne rosacea of the face, of nine months' duration, which had resisted several methods of treatment, the iodide of sulphur could not be borne, and iodide of potassium was given instead, in doses rapidly increasing to a drachm a day. At the same time the diseased parts were rubbed briskly every evening with a sulphur pomade (15 sulphur to 30 lard). In fifteen days the cure was almost complete, and two months later there had been no return of the disease. —*Lyon Médical*, June 18th.

Anatomical Observations on Diphtheria.—Prof. Bizzozero, in *Il Morgagni*, No. 3, 1876, gives the results of his studies on the alterations of the spleen and of certain hæmatopoetic organs in membranous inflammation of the stomach. He found the splenic pulp full of red globules. The Malpighian corpuscles, in addition to the usual lymphatic elements, presented a moderate number of small granules of fat, numerous small granules becoming pale on the addition of acetic acid, and large nucleated cells containing a certain number of fatty granules.

The Peyer's plaques were much tumefied; their superficies were irregular, with irregular depressions and elevations, and a reticulated disposition. The follicles were constituted of the usual lymphatic cells, but they were more granular, containing numerous fatty and albuminoid granules.

Bizzozero found also on the internal superficies of the stomach pseudo-membrane, apparently similar to the croupous exudations existing on the mucous membranes of the pharynx, tonsils, etc.—*Lo Sperimentale.*

On the Influence of Traumatism on Pregnancy.—M. Guéniot recently read a paper on this subject before the *Société de Chirurgie* of Paris, his observations being based on an analytical study of 240 cases of injuries and wounds of all sorts received during pregnancy, including also surgical operations performed on pregnant women. In closing his paper, he embodied the results of his studies in the following conclusions:

I. When the traumatism affects a pregnant woman who is in a state of perfect health (woman healthy, uterus healthy, products of conception healthy), it exerts as a rule no prejudicial influence on the pregnancy, whatever may be its variety, and, to a certain extent, whatever its intensity. To this rule there are the three following exceptions:

1. When the injury implicates any part of the genital zone, that is to say, the vulvo-uterine canal, the perineal or the anal region, the pregnancy is not infrequently cut short. This unfavorable result, moreover, seems to depend more on the duration or repetition of the traumatic act than on its severity.

2. Whatever may be the seat of the injury, if there be great loss of blood within a short period of time, the pregnancy is seriously menaced and the life of the woman more or less compromised.

3. Finally, if the injury be secondarily aggravated by erysipelas, phlegmon, angioleucitis, or other inflammatory complication, there is danger of abortion.

II. When the gestation is complicated by some pathological condition, such as abnormal irritability of the uterus, disease or excessive size of the product of conception, albuminuria, etc., any injury, no matter how slight it may be or what region it may affect, will as a rule excite premature expulsion of the ovum. In this case the true cause of the abortion is to be found in the previous pathological condition, organic or functional, that complicated the pregnancy, and not in the traumatism, which simply plays the part of adjuvant, or exciting cause.

III. In view of the extreme difficulty, and often even impossibility, of diagnosticating some of these morbid conditions (abnormal irritability of the uterus, disease of the ovum, etc.), it is necessary to be very cautious about advising surgical operations during pregnancy. If the operation involve the genital zone, pregnancy presents an absolute counterindication to its performance, except in cases of necessity.

IV. Finally, with regard to the medico-legal aspect of abortion, in order to properly appreciate the influence of the injury on the abortion, it is absolutely necessary to know the condition of the different parts of the ovum at the moment of their expulsion.—*Le Mouvement Médical*, June 17th.

The Electrolytic Treatment of Tumors.—Dr. Julius Althaus, of London, thinks that the limits of the usefulness of electrolysis in the treatment of tumors are now so thoroughly ascertained, that they will be neither notably enlarged nor diminished by future observations. The following is a short resumé of his latest conclusions as to the varieties of tumors in which electrolysis is useful:

1. *Nævus.*—Electrolysis possesses undoubted advantages over all the other methods of treating this variety of tumor. The ordinary round, flat nævus, which is elevated but little above the level of the skin, is often cured by a single electrolytic application; but the large port-wine spots often require half a dozen sittings. Dr. Althaus uses for the operation from 10 to 15 cells of Daniell's battery, both poles being introduced into the tumor. As soon as the circuit is closed the destruction of the nævus begins, the blood-vessels and skin seeming to wither up rapidly. The destruction takes place most actively in the neighborhood of the positive pole. The current should not be too strong nor continued too long in any one spot, or it will leave a cicatrix. After the operation, the surface should be covered with a gold-beater's skin, but no dressing is necessary, for there is no discharge and no pain. The scab falls off in ten to fourteen days, leaving a healthy surface that gradually assumes the appearance of the neighboring skin.

2. *Bronchocele.*—Electrolysis is less painful and less dangerous than the usual surgical treatment of the cystic form of goitre. Dr. Althaus introduces two or three needles connected with the negative pole of the battery into the cyst, the positive electrode being applied to the skin in the form of a moistened sponge. The current decomposes the fluid in the cyst, and converts the solution of chloride of sodium into a solution of caustic soda, which cauterizes the secreting membrane of the cyst, and prevents the production of more fluid. Two to six applications generally bring about a cure.

The hypertrophic bronchocele is much less amenable to treatment, and is generally let alone by surgeons. When, however, it becomes dangerous by pressure on important structures, electrolysis is indicated, and may be advantageously combined with injections of tincture of iodine. The latter breaks down the internal structure of the tumor, especially when it is old and firm, and so secures a freer passage for the electric current through the mass. In recent cases the injections may be omitted.

3. *Atheroma.*—Electrolysis removes this variety of

tumor quickly, and without risk, and leaves no cicatrix. The action is more rapid when both poles are introduced into the tumor, than when the negative alone is used.

4. *Recurring Fibroid.*—As the knife fails to cure this variety of tumor, Dr. Althaus thinks that electrolysis should receive a fair trial. The results he has obtained with it so far have not been particularly encouraging, probably because in all his cases the tumors had attained enormous size, and had existed a long time. In one desperate case, on which Sir Jas. Paget, Sir Wm. Fergusson, and Mr. Cesar Hawkins had refused to operate, electrolysis relieved the intense pain and caused a diminution of the size and hardness of the tumor; but the treatment could not be followed out for a sufficient length of time to give positive results, as the patient was unable to remain in London.

5. *Cancer.*—Although electrolysis cannot replace the knife in the treatment of primary carcinoma, it often produces excellent results in epithelioma and recurrent cancer. It cannot remove the cancerous diathesis, but it relieves the pain, enables the patient to sleep, improves the appetite, and strengthens and quiets the entire system, and so renders the last months of life more bearable.—*Berliner klin. Wochenschrift*, April 17th.

Ammonæmia.—At the meeting of the *Aerztlicher Verein* of Marburg, on February 9th, Prof. Roser exhibited the bladder of a young man who had suffered from calculus. No operation had been performed, because, when admitted into the hospital, he had symptoms of pericystitis with marked collapse. The bladder presented an ulcerated perforation, and the ammoniacal urine was infiltrated as far as the inguinal ring. The professor recounted a number of similar cases of ammoniæmic collapse, from which he deduced the following conclusions:

1. Acute ammoniæmia, which is caused by absorption of decomposed urine, produces marked collapse with low temperature of the blood.

2. A low temperature in cystitis and pyelitis may be considered diagnostic of ammoniæmia.

3. When the source of the ammoniæmia is removed without delay by cutting into the urethra, the bladder, or the pelvis of the kidney, the symptoms of collapse often disappear.

4. Ammoniæmia deserves more attention on the part of surgeons than it has heretofore received.—*Berliner klin. Wochenschrift*, June 19th.

Bromide of Arsenic in the Treatment of Epilepsy.—Dr. Th. Clemens, of Frankfort-on-the-Main, has employed bromide of arsenic for twenty years in the treatment of diseases of the nervous system, and especially of epilepsy, and claims that he has obtained astonishing results with it. He uses the liquor arsenic. bromat., and gives one or two drops in a glass of water once, or, if necessary, twice daily. These minute doses may be given for months and even years, without producing the usual unpleasant effects of a long-continued arsenical course. All his cases of epilepsy have been markedly relieved and improved by this remedy, but in only two cases has it produced a complete cure. In many cases of incurable epilepsy, complicated with idiocy and deformities of the skull, the fits were reduced in number from twenty in the twenty-four hours, to four or even two, a result that has been obtained by no other treatment. In connection with the bromide of arsenic, an almost exclusively meat diet is advised. The patients should be as much as possible in the open air in the daytime, and their windows should be kept open at night. Unlike bromide of potassium, this remedy does not require to be given in increasing doses, and instead of interfering with digestion, improves the nutrition and strength. Dr. Clemens has employed the following formula since 1859, and thinks that it ought to replace Fowler's solution, which is irrational in its composition and uncertain in its action. This solution becomes stronger with time; the chemical union of the bromide with the arseniate of potash becoming more and more perfect.—℞ Pulv. Arsenic. alb., Potass. carb. c. tartar., ää ʒ i.; coque cum aqua destil. lb. ss. ad solut. perfect.; adde, aq. evaporat. restituta, aquæ destil. ℥ xij., dein adde brom. pur. ʒ ij., refrigerat. stet per sufficient. temp. ad decol., S. liq. arsenic. bromat.—*Allg. Med. Central-Zeitung*, May 24th.

On some Vesicular Diseases of the Tongue.—Dr. Stokes contributes to the *Dublin Journal of Medical Science* a paper in which he claims that there are "three distinct conditions in which a vesicular disorder of the tongue may be found." One is a complaint first described by Earle in 1822, and since called "Earle's Disease," in which the entire thickness of the tongue was pervaded by minute, semi-transparent vesicles; the clusters were in some cases separated by deep clefts, which discharged a fetid, irritating sanies, and the slightest injury caused the diseased part to bleed profusely. The disease gradually yielded to a strict attention to perfect quiet and cleanliness, combined with large doses of hyoscyamus, as much as ʒ i. of the extract having been given daily. The second form is one which does not yield to treatment, and is illustrated by a drawing from the museum of the Richmond Hospital. The disease consists in a mass of vesicles with pink bases and semi-transparent tops of hemispherical form, forming a circumscribed tumor occupying nearly half the tongue. There is no induration of the surrounding parts. The growth occasionally swells a little and is painful, but has undergone very little alteration in size or appearance during the twenty or more years it has existed. The pain and irritability are relieved by the use of a weak solution of citric acid as a lotion, and of hyoscyamus, but no treatment has succeeded in causing a radical improvement. In the third form the vesicles are superficial and dependent on gastric irritation, or on the presence of bad teeth, or of a tumor, or ulcer of simple or specific character, or lastly, may be due to the herpetic diathesis.—*Dublin Journal of Medical Science*, May, 1876.

Some Forms of Dyspepsia.—A clinical lecture on the above subject, by Dr. Francis Delafield, is published in Vol. II., No. 1, of the *American Clinical Lectures*. Dr. Delafield holds that in many cases of dyspepsia only one of the digestive organs is at fault, and that a proper analysis of the symptoms will enable the physician to discover whether it is the stomach, the small or the large intestine, or the liver that is at fault. The symptoms of stomach dyspepsia are nausea and vomiting, pain, loss of appetite, eructations of gas and of sour fluid, and in old and severe cases loss of strength and flesh. The pain always follows the ingestion of food, and is relieved by vomiting. The lesions consist in a chronic inflammation of the mucous membrane of the stomach, with a loss of power in the muscular coat. The inner surface of the organ is coated with tenacious mucus, the connective tissue between the gastric tubules increased in amount, and the tubules themselves atrophied. The stomach may be very small or much dilated. The milder cases can often be cured by regulating the diet and life. In the severe cases Dr. Delafield recom-

mends washing out the stomach with the stomach-pump, and cites two very bad cases that he cured with this treatment, all drugs having previously been proved useless.

In dyspepsia due to functional derangement of the small intestine, the principal symptom is pain, which may be referred to any part of the abdomen, is constant and dull in character, and has no special relation to the ingestion of food or its quality. It is generally relieved for a time by liquor. It may come on at regular intervals. The appetite is good, and the bowels are regular. There may be nausea, especially in the morning, but it does not follow eating, and there is no vomiting. The patients are languid and feel good for nothing, and are apt to become hypochondriacal. In the treatment of this form cubebs, ipecac, and assafœtida are useful; riding on horseback and travelling are to be recommended.

Dyspeptic symptoms dependent on disordered functions of the liver are very common. The great majority of the cases of dyspepsia met with in Dr. Delafield's clinic are cases of liver dyspepsia. The Doctor divides these patients into two classes: the first including persons of florid complexion and well-developed muscular and fatty tissues; and the second, those of pallid complexion, spare figure, and feeble muscles. In the first class he thinks that the symptoms are due to derangement of the functions of the liver, which should effect the destructive metamorphosis of the albuminoid substances, so that the patients receive a full supply of the nutritious portions of the food, but do not get rid of the excrementitious. In the second class, on the other hand, the excretory and destructive functions of the liver are well performed, but those functions which should effect the assimilation of fat and peptones are disordered, so that the patient is imperfectly nourished. The usual symptoms of the second class of cases are headache, curious nervous feelings, such as local chilly or pricking sensations, dull pain in the right hypochondrium, constipation, flatulence, and sleeplessness. The urine is normal, or contains an increased amount of oxalate of lime, or sometimes stellate crystals of phosphate of lime. This condition is often very intractable to treatment. The diet should be full and nutritious; wines and other liquors are often useful, and cream and cod-liver oil are sometimes indicated. Strychnine, aloes, podophyllin, etc., must be given to relieve the constipation; bromide of potassium, assafœtida and guarana to allay the nervous symptoms and restlessness; and mineral acids as a tonic. Exercise in the open air is to be insisted upon, and in young persons the daily use of the cold bath. In the first class of cases the symptoms are generally vertigo, uncomfortable feeling in the head, inability to apply the mind to business, and partial loss of memory. The appetite is usually good, the bowels irregular, and the urine loaded with uric acid or the urates. The treatment should consist mainly in total abstinence from all alcoholic drinks, and from tobacco, and in exercise in the open air. The natural alkaline and sulphur waters are often useful, but no regular plan of treatment, as regards drugs, can be laid down.

Dyspepsia due to derangement of the large intestine is often met with in old people, and seems to depend either on a loss of power in the muscular coat, or on a loss of sensibility in the mucous coat. The principal symptom is constipation, with headache, flatulence, uncomfortable feelings in the abdomen, etc. The constipation alternates with diarrhœa, the passages being small and painful, and not followed by a feeling of relief. All these symptoms are consequent on the accumulation of hardened fæces in the rectum, which, despite the diarrhœa, is never entirely emptied. The treatment must consist first in clearing out the large intestine by means of a laxative, aided, if necessary, by scooping out the hardened fæces with the finger or some convenient instrument, and subsequently in the use of aloes and strychnine, and regulation of the diet.

Injecting the Male Bladder without the Aid of a Catheter.—For the last year Prof. McGuire, of Virginia, has made use of the following simple procedure in injecting the male bladder. He takes the ordinary rubber-bag syringe used to inject the bladder through a catheter, the nozzle of which is provided with a stop-cock, and tapers to a point. The bag is filled with warm water, all the air being carefully excluded, and the nozzle oiled and introduced into the urethra for an inch or an inch and a half. The urethra is then gently compressed around the nozzle of the syringe, the stop-cock turned, and, by gentle and continuous pressure on the bag, the water forced along the urethra into the cavity of the bladder. It is important to avoid all rough manipulations, and to inject the fluid slowly. With a little practice the patient can perform the operation quite readily himself. This method of injecting the bladder is especially applicable to those not rare cases in which the introduction of a catheter causes pain or urethral fever. The warm water may be medicated, but it is important to remember that the mucous membrane of the bladder is more sensitive than that of the urethra, and consequently these injections must be milder than simple urethral injections would need to be.

Prof. McGuire has employed this method with advantage in a case of malignant vascular tumor of the bladder, and preparatory to the operations of lithotrity and lithotomy. In a case of severe cystitis following the first of a course of lithotrity sittings, distending the bladder with water by means of the bag syringe was followed by such immediate and great relief that he was able in a few days safely to employ the lithotrite again. In a case of severe strangury, the same proceeding gave almost complete and immediate relief. It is, however, in cases of cystitis and enlarged prostate that Prof. McGuire anticipates most benefit from this method of injecting the bladder. In these cases, the introduction of the catheter and its necessary retention in the bladder for some minutes, often cause urethral fever and increased irritability of the bladder that more than counterbalance the good the injection may have done. The frequent introduction of the catheter, moreover, in cases of chronic hypertrophy of the prostate, undoubtedly has a tendency to increase the already existing trouble. In these cases the bag syringe can, with few exceptions, be substituted for the catheter. Four or five ounces of warm water, simple or medicated, are to be injected and retained for a few moments and then expelled. What will remain in the bladder will be, not the phosphatic, irritating urine that was there before the operation, but a small portion of this diluted with the water. By repeating the injection the residual fluid can be made entirely unirritating.—*Virginia Medical Monthly*, July, 1876.

A Benefactress of Mankind.—A Mme. Hagelle has bequeathed to the *Assistance Publique* of Paris the sum of two million dollars, to establish somewhere in the environs of the capital a hospital for the aged, the infirm, and the incurable.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, September 9, 1876.

LENGTHENING THE TERM OF HOSPITAL SERVICE.

THE reorganization of the New York Hospital has given the governors of that institution an opportunity for canvassing the different methods which may be suggested for increasing its efficiency as a charity, and of expanding its influences for professional advancement. Not long since we referred to the report upon the Cottage plan of organization which was called forth by a special resolution, and now our attention is directed to the subject of the internal administration of the "New Hospital," which also at the suggestion of the Board is the basis of a report from the Medical Staff. Assuming that there is a great disproportion between the amount of work to be done and the number of persons appointed to perform it, the Medical Board suggests that the number of the attending staff be reduced, and that the term of service be increased. The following is the plan which, in the words of its advocate, Dr. Sands, is calculated to create "a much needed reform in hospital management":

"I. The assignment to each division of the hospital, of one attending physician or surgeon upon whom, together with an assistant physician or surgeon, shall devolve the entire care and responsibility of the service throughout the year. It is assumed that in the plan recommended the assistant shall, in addition to aiding the attending physicians and surgeons, perform regularly the duties of the dispensary department.

"II. The reduction of the present number of the attending staff so that there shall remain but three, namely: one attending physician and two attending surgeons, to each of whom shall be assigned one-third of the entire number of beds which the new hospital building is designed to contain.

"III. The establishment of a rule forbidding the members of the attending staff from holding similar positions in other institutions."

The principle involved in the propositions is correct, but the change will, we think, be too radical for the purposes of experiment on the part of the governors. There is no doubting the fact that the patients will in the main be benefited by a longer service on the part of the attending physician or surgeon, but the question arises whether the same end might not be attained by dividing the services among a larger staff. Dr. Hackley, one of the attending physicians, offered a modification of this plan which seems to be more practicable in that it does not involve the necessity of reducing the present staff. He advises, so long as the accommodations of the hospital are limited, that the medical staff be allowed to decrease by resignation and death, to four physicians and four surgeons; that one-half the beds be surgical and one-half medical; that the terms of service be six months each, ending respectively on August 1 and Feb. 1; and that the physicians and surgeons shall draw lots, the four of each set being the active attendants for the year.

Every one who has acquainted himself practically with the internal administration of our hospitals must admit that the system has been very defective. The eagerness with which medical men, especially college professors, seize upon hospital positions, and their greed in holding as many as possible, have engendered a carelessness in the performance of their duties which has been very prejudicial to themselves, to the patients, and to the profession at large. As a rule the size of the staff in our hospitals is too large, and the services, in order to be equally divided, are too short. This is especially the case during the winter term of lectures at our colleges, when each professor, anxious to have his share of clinical opportunities, is willing to reduce his period of service to suit the emergencies of the situation. The natural result has been that the attending physician or surgeon cannot acquire a knowledge of his cases before he is called to give place to his successor, and with the exception of a few patients upon whom he may deliver clinical lectures, he leaves the entire charge of his wards to the senior member of the house staff. We speak from actual experience when we assert that this is the rule rather than the exception, and that the attending surgeon or physician is oftener apt to walk through his wards as a matter of form than of duty.

In referring to the proposed change in the internal administration of the New York Hospital, we wish to speak of them not only in connection with that institution, but of others of its class which also call for them in our larger cities. In view of their necessity, it is a fortunate circumstance that the Medical Board representing one of the oldest and most reputable charities of the country, shows such a strong disposition to lead the van of reform. The details of the plan may be open to more or less criticism, but the principle is beyond question, and must commend itself to the careful consideration of those who have the

true interests of these institutions at stake. Although this is but one of many of the reforms needed in hospital management, it is a very important starting point for others which will naturally follow. In this connection we would refer to the resolution forbidding any one connected with the hospital from holding a similar appointment elsewhere. If the lengthening of the term of service accomplishes no more than a strict adherence to the one appointment system, it will be attended with an unquestioned good to the profession at large in giving many worthy men a chance to benefit by hospital experience, who are shut out by uncompromising monopolists. Very many medical gentlemen hold two such appointments, not a few three, some four, and one as many as eleven. The sweeping application of the one appointment rule would convert many of these gentlemen into public benefactors in proportion to the number of extra positions they may hold. From this point of view the privileges of the gentleman with eleven of these appointments would be envied by the medical world at large.

CAUTION MARKS.

The American Pharmaceutical Association at its last annual meeting appointed a committee to confer with the American Medical Association, and to suggest to that body the advantages which would result from the adoption of means of greater protection to patients in prescribing. It was recommended as a measure towards this desirable end that a list should be selected of dangerously active medical preparations, and their maximum doses noted, as well as the maximum quantity that may be safely administered during twenty-four hours—such quantity not to be exceeded in prescriptions without the addition of some caution mark previously agreed upon by the physician. In case a prescription is presented to be compounded with articles ordered in quantities exceeding these maximum doses thus laid down, and without the caution marks annexed, the pharmacist must return the prescription to the physician, in order that the requisite caution mark or marks shall be added. It was stated that in some European countries a list, such as is here suggested, is framed by legal enactment, published by authority, and appended to the Pharmacopœia. It thus becomes obligatory on every pharmacist. The President of the American Medical Association appointed as a Committee of Conference on its part three gentlemen, well known as teachers and authorities—Profs. Stillé, Biddle, and Rogers, who are resident on the very spot most available for consultation. The Pharmaceutical Association will meet at Philadelphia about the middle of September, and will doubtless take immediate action in the premises. Whatever recommendation the Committee may make that will jointly affect the interests of the alliterative trio—physician, pharmacist, and patient—will doubtless be well worthy the conscientious observance of all prescribers and dispensers of potent remedies. It would seem but right that the responsibility for intentionally large doses should be placed where it properly belongs. Moreover, it is in the experience of every druggist that an inquiry on his part as to the size of a dose prescribed, or a suggestion to the practitioner that such dose is an unusual one, may be met with a discourteous reception. Rather than risk the loss of so valuable a source of pecuniary profit as is offered in the custom and favor of a multitudinous prescriber, the druggist may be tempted to diminish the amount of the active ingredient without consultation with him, and thus at once destroy, perhaps, the effect for good which might have followed the compounding of the larger dose. It remains to be seen whether the same fear of offending a medical patron may not attend also the neglect of caution marks, should they ever come into use. Some resistance may also be made by heroic dosers to any arbitrary table of maximum doses, beyond the limits of which they are habitual travellers. After all, even when caution marks become the order of the day, thorough education in each profession, and the exercise of a fair share of common sense, must still control both prescriber and compounder.

Reviews and Notices of Books.

Transactions of the Thirtieth Annual Meeting of the Ohio State Medical Society, for 1875. Cincinnati: A. H. Pounsford & Co., Printers, 9 & 11 West Fourth St.

The 214 pages in this volume contain the minutes, the address of the retiring president, a list of deceased, active, and honorary members, and the papers read before the Society, together with the discussions to which they gave rise. Dr. W. T. Ridenour furnished a paper upon the "Pathies" of the day. Some practical points in the Eye Department were presented by Dr. W. W. Seeley. Dr. P. S. Connor related how he used the aspirator in cases of retention of urine. The relation of Consumption to Life Insurance was considered by Dr. W. B. Davis, and provoked quite an animated discussion. Puerperal Blindness was referred to by Dr. W. J. Scott; and the "Prevention of Laryngeal Tumors," by Dr. J. T. Whittaker, stirred up the members who were not skilled in the use of the laryngoscope. This was appropriately followed by a well-written paper upon "The Prurigo of Hebra," by Dr. L. R. Longworth. The *attention* was next called, in a practical manner, to "Symptomatic Ophthalmia," by Dr. E. Williams, and Dr. C. E. Beardsley reported four cases of "Phymosal Paraplegia," all cured by circumcision. Dr. Museraft reported a case of recovery from supposed fracture at the base of the skull; and Dr. W. C. Chapman discussed, somewhat philosophically, "Puerperal Eclampsia." Dr. W. J. Scott also reported cases of what he termed "Railroad Locomotor Ataxis," occurring in conductors and engineers.

The two pages of *errata*, which appear in the posi-

tion of a preface, are unpardonable, and why the corrections were not made upon the proof-sheets is a mystery.

A Practical Treatise on Diseases of the Eye. By Robert Brudenell Carter, F.R.C.S. Edited, with Additions and Test-Types, by John Green, M.D. Philadelphia: Henry C. Lea, 1876.

The English edition of this work was reviewed in the Record about a year ago, and the American edition now published is essentially the same work, though improved by notes and additions of practical value. Some short passages, of little interest to American readers, have been omitted, and a number of inaccuracies corrected; some additional illustrations have been introduced, and a set of test-letters is given by the editor at the end of the volume.

In Chapter VI. there are some important additions made to the surgery of the lachrymal passages, particularly an account of Agnew's operation for laying open the lachrymal sac, preparatory to its destruction by caustics.

A good account is given in Chapter VIII. of Arlt's operation for the removal of pterygium. In Chapter XIV. mention is made of J. F. Noyes' method of advancing the external rectus muscle, modified somewhat by the editor. The prevention of strabismus, and its cure in its incipient and early stages by the use of convex-glasses or atropine, or both, is an important subject, which has been entirely passed over by Mr. Carter, and the American editor has done good service in incorporating a description of it in the work. The latter has also added some practical hints upon the subject of muscular asthenopia in myopes in the chapter upon the uses and selection of spectacles. The subject of the progressive tendency to increase of myopia, and the relation of external and internal recti muscles to this increase have also briefly been considered in the American edition, so that it may fairly be considered of somewhat more value than the English edition.

Correspondence.

MEDICAL CENTENNIAL AFFAIRS.

(From our Special Correspondent.)

Philadelphia, August 19, 1876.

A medical man of this city was anxious, before the Exposition opened, that his son, also one of the profession, should have medical charge of the hundreds of patients who might need his services, at one of the large hotels newly erected in that vicinity. He felt that such an opportunity for pecuniary profit from attention to the ailments of injudicious sight-seers was not available every day, and that the aspirations of his son might be duly gratified while his pocket nerve was correspondingly titillated. He lost no time, therefore, in seeking the proprietor of the hotel with the view of impressing upon him the desirability of such an alliance. That functionary, however, was too far-sighted to grant such a concession, as it was technically called, without himself deriving some advantage from the prospective sickness or sufferings of his guests. Much to the surprise of the father, who had of course expected to secure the position gratuitously, such a fabulous sum was demanded—two thousand dollars, I have been told—that the offer was at once abandoned. Whether any other medical man assumed the duties of the post on such extravagant terms, I am at a loss to say. It is more than likely that the position has not been a very profitable one, for the visitors to Philadelphia have not been, as a rule, those who could afford the luxury of being sick at the rates of charges in which a medical man, with a two thousand dollar concession hanging over his head, would be likely to indulge. Everything else in immediate proximity to the grounds has been a complete and absolute pecuniary failure. Restaurants in endless profusion line the outskirts of the Centennial buildings, but most of them remain almost empty from morning to night. In some cases the proprietor spends most of his time sitting outside his own door, waiting for a transient customer, who only occasionally disturbs his meditations. As a general rule, the visitor to the Exposition spends all his time and money economically inside the grounds, and when he is tired goes home, in total disregard of all outside inducements to tarry. Possibly the invalid follows a similar course, and leaves the hotel doctor wholly in the lurch, in selfish and total oblivion of the concession with which his fees are heavily mortgaged.

The Italian medical exhibit, which we casually passed by in our last visit, is a very rich one—on the catalogue, but not in reality. It is difficult, indeed, to separate from the confused mass into which many of the articles have been promiscuously thrown together, the displays of sulphur made by half a dozen different firms, and of chemicals of all kinds. There are mentioned in the catalogue more than a hundred exhibitors of chemicals alone, in which licorice, olive oil, and cream of tartar play a very conspicuous part. There would be a monotony in examining this line of goods, did the actual display bear any ratio to the length of this printed list. The strictly medical portion of the exhibit includes among other items the "Antisyphilitic Remedy of Dottor Pollini," the merits of which are described in a thick pamphlet, evidently translated by an Italian, who has not fully mastered English. The public are informed at the outset that the price for two hundred years has been ten francs, and has not been changed. The trade, however, are told that "relative deductions are accorded for large acquisitions; to the apothecaries as well as to commercial houses, according the commission." The mayor of Milan appends a certificate that the remedy has been sold in that city for more than a century, from his own personal knowledge, we presume. The same confusion exists in the display of pharmaceutical preparations, almost all of which are inaccessible to the exploration of visitors on account of the careless manner in which they are heaped together. For any good and useful purpose subserved by such exhibit, they may as well have never left the shores of sunny Italy.

We look in vain for the contribution referred to in the catalogue as "microscopic, normal, and pathological anatomical preparations," sent over by the Director of the Anatomical and Pathological Museum of Florence, and presume, as in a number of other cases, they have not yet been received. We are interested, however, in the diagrams representing the apparatus of Colli Clericetti for human cremation, a showy temple, "Edicola Crematina," with sectional views, one of which exhibits a corpse just about ready to pass into the fiery furnace which is to reduce his flesh and bones to ashes. In the same corner we notice a few Italian medical works—Gamberini on venereal and cutaneous diseases, and Manzini and Rodolfi on transfusion of blood. Not far from these is

a case of "sciringhe metalliche flexibili," whose name thus given needs no translation.

Sweden is not at all extensively represented in the Exposition, from a medical point of view. A few chemicals, not of special interest to the physician; several contributions of Aseptin for the preservation of provisions and animal materials; and Amykos for the complexion, and a small case or two of surgical instruments, not deserving separate note, being chiefly for the eye, for vesico-vaginal fistula, and silver catheters, make up almost the entire collection. The Royal War Medical Department, however, makes in the catalogue a special exhibit of surgical instruments for military use, but all we can find, after inquiry from one of the Swedish officials and diligent search, is a sort of medical supply wagon, tightly locked, on which the Geneva cross is a conspicuous feature.

In a large and handsome case in the Swedish department are exhibited, by Prof. Axel Key, specimen numbers and volumes of the Nordiskt Medicinskt Arkiv, edited by him, and numerous popular Swedish works, which seem to be fascicnli of a series of treatises on natural science, by Dr. Gustav Retzius and himself. A handsome illustrated quarto volume lies open, with a full-page colored sectional view of the brain. It is their joint work, in German, "Studien in der Anatomie des Nervensystems und des Bindegewebes."

Passing next to the exhibits of Australasia, India, Jamaica, Canada, and other colonial dependencies of Great Britain, we find much to interest us as physicians. From distant Queensland we notice a large number of specimens of gums, derived from the eucalyptus, iron-bark, blood-wood, etc., castor oil seeds, and samples of dugong oil, used both internally and externally for medicinal purposes. Victoria sends a confused and not well arranged collection of barks and resins of various kinds, in which the eucalyptus is well represented. I notice that many of the foreign countries—most of them, indeed—send specimens of aërated waters, which is, I presume, another name for soda or mineral waters. What object the senders can have in paying the expense of freightage, etc., to such a distance for bottles that on their face give no information, and whose interior is a sealed secret to all visitors, is a mystery. The fault throughout the whole Exposition, applying to medical exhibits as well as to others, is the want of intelligent explanation of things exhibited. Some of the most interesting features of the display would bear very careful study at the hands of the physician; but few visitors will take the trouble of hunting up, in a remote corner of the department, the foreign commissioners or agents, whose only response may be in English so thoroughly broken that no intelligible phrases can be framed from the pieces.

Bagot of Adelaide exhibits numerous small cakes of "Portable Dry Extract of Meat;" and Hood and Co. of Melbourne a very creditable collection of miscellaneous drugs, the only one from Victoria, including soluble chlorodyne, solution of carbazotate of ammonia, phosphorized cod-liver oil, bismuth ore, oil of peppermint, distilled four years ago from the herb grown near Melbourne, and prepared hydrated silicate of aluminium, extracted from granite and employed for the cure and prevention of bed-sores. This firm was awarded prize medals for pure chemicals at Dublin in 1865, and afterwards at Melbourne and Adelaide. In another case is a fine collection of about thirty chemical and pharmaceutical preparations obtained from the eucalyptus or gum tree of Australia, and other indigenous vegetation, which Mr. Joseph Bosisto, one of the Commissioners from that colony, and President of the Pharmaceutical Society of Victoria, has presented to the Philadelphia College of Pharmacy. Eucalyptus is offered in a dozen different phases, such as powder, ointment, solution, cigarettes, oil, tincture, various colored essential oils derived from different species, eucalyptol, etc. It may not be generally known to the profession, who look upon this as one of the new remedies, that four-fifths of Australasian vegetation consists of the eucalyptus, there being in all one hundred and thirty species. Taking it in mass, although the blue gum or "globulus" species is that best known to us, it has a distinctive local reputation as an agent destructive of miasmatic poison. It is said by authorities resident in that country that Australia is pretty free from endemic or miasmatic fevers, and that the latter exist only as the eucalyptus recedes. These effects are thought to be partly due to the fact that the plane of the leaf is parallel to the axis of the tree, thereby allowing free action to the light and heat of the sun on both sides, and that the roots are dispersive and drain water largely from the soil.

From a pamphlet on Victoria now before us, we notice that Mr. Bosisto, in a paper read before the Royal Society of Victoria not long since, dwells on these points, and argues also that the physical geography of Australia differs in no way from that of other countries; that the evergreen eucalyptus exerts its active influence physically, through its root as an absorbent of humidity, and through its abundant leaf surface, and its leaf evaporation of water, oil, and acid under a perpetually genial temperature. Chemically, it acts through its peculiar volatile oil, its volatile acid, and their power of producing peroxide of hydrogen, the plant itself and the air being found by experimental observation to be abundantly charged with these volatile substances. It may be surmised also, while we are on the subject, that so many parts of the world contribute eucalyptus to the Exposition, that more direct attention will doubtless be awakened in the United States to the remedial virtues of certain species of it. South Australia also sends a variety of wines, among which may be mentioned quinine wine, by Bickford of Adelaide.

From the Cape of Good Hope, in addition to a tempting exhibit of about twenty-five varieties of wines and brandies, all of which are in bottles tightly corked, there are dried barks and leaves, many of them of medical interest, with unfamiliar names; bitter bark used in fever cases by the native or Kafir doctors, etc. We also notice a label marked "Witch Doctor's Dress," but we look in vain for the various articles of apparel, which is probably that of the first Adam, minus the fig-leaf. Some "divining bones," consisting of about twenty human metacarpi strung together on a cord, and two "medicine roots" are all that we see of it. A number of specimens of medical barks from the Mauritius, with equally unfamiliar botanical names, are exhibited in that section, some of them belonging particularly to the Quisqualis (liberally translated, what-d'-ye-call-'em) Indians.

India supplies about three hundred specimens of the materia medica, neatly arranged in horizontal cases, including many familiar articles, such as cinchonas, neem bark (the Azadirachta Indica), aconitum, cannabinum, papaver, cassia fistula, etc. From British Guiana are displayed castor and cayenne oils, starches suitable for food, Indian gums, and cassareep, which is the inspissated juice of the roots of the bitter cassava. This juice has an economic aspect, for it is used in making pepperpot, to such advantage that by adding a small quantity of it from time to time to varieties of

animal food, the same pepperpot may be kept in daily use for several years! So says the descriptive card attached to the specimen, and we confess that we are lost in admiration of this potent article, which can daily rejuvenate a mysterious dish so that it will still continue to be the same familiar old pepperpot of years gone by. Let us devoutly hope that the knowledge of its merits as a preserver of this kind of vitality may forever remain unknown to the servers of free lunches, although this is of course a matter in which medical men are not interested.

It seems hardly worth our while to dwell on the small contributions of drugs, etc., sent to the Exposition from these and other distant British colonies, the only slightly interesting feature of which will not bear the elaboration of description. Coming nearer home we reach the Atlantic possessions of Great Britain, Bermuda and Jamaica, with their arrowroot, the Superintendent of the Government Botanical Gardens at Kingston, in the latter country, sending fine specimens of simarubra, baobab fruit (Adansonia digitata), sarsaparilla, cinchona succirubra, c. calisaya, c. officinalis—from all of which it is stated that quinine is made—jalap, mucuna, aloes, etc. This last exhibit is well worth the attention of the medical visitor. Cascarilla and canella barks are also noticeable in the section occupied by the Bahamas. Canada makes a creditable display of pharmaceutical preparations. The principal houses represented are those of William Saunders of London, a very active member of the American Pharmaceutical Association; Lyman, Clare & Co. of Montreal, and Lyman Bros. & Co., Toronto. Many of the elixirs exhibited by Mr. Saunders are labelled "Amer. Pharm. Ass'n.," and a large number of medicated pessaries, suppositories, extracts, etc., are also displayed by him. The Toronto firm just mentioned exhibits fifty pounds of crystallized nitrate of silver in a single jar, which is only one of the features of a very fine exhibit. Several dozen bottles of fluid extracts, of the same color and uniform size, suggest monotony, even if they express quantity and variety of materials. With the exception of a comfortable chair for invalids, by Roy & Co. of Montreal, admitting of motion of the patient in a score or more of varied positions, and some surgical apparatus, spiral spring trusses and artificial limbs, Gross's patent (not the Professor), there is nothing else in the Canadian medical exhibit to comment on.

R. J. D.

FŒTUS SHOT IN UTERO; NORMAL DELIVERY AND RECOVERY OF THE MOTHER.

To the Editor of The Medical Record.

Sir:—The following item was furnished me by Dr. Chas. Berry, of New Ulm, Minnesota, the attending physician in the case:

On the fourth of July last, Mrs. Anderson, of Alfsbury, Sibley Co., Minn., a Swede aged 28, pregnant at about the full term, was shot by the accidental discharge of a pistol in the hands of a young man who was riding by her side in a farmer's wagon. The ball entered the abdomen of the woman two inches above the crest of the right ilium and a little back of the ant. sup. spinous process, and took a downward and forward direction. A little shock was felt, but no serious symptoms followed. In forty hours delivery of a dead child took place, and the pistol-ball was found in its abdomen. Labor was normal in all respects, except that there was some nervous prostration, and recovery was complete.

Franklin Staples, M.D.

Winona, Minn., Aug. 22, 1876.

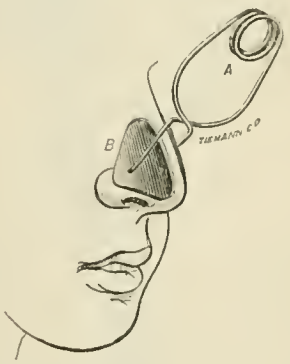
New Instruments.

THE TREATMENT OF EPISTAXIS BY THE NOSTRIL CLAMP.

By SALVATORE CARO,

NEW YORK.

On February 17th, 1875, at one o'clock A. M., I was hastily summoned to relieve Mrs. S., aged 65, who was (as I was informed) vomiting blood. On arriving at her bedside, I found her lying in a pool of blood and almost pulseless. On raising her up, to ascertain whence the blood was coming, she threw up a large quantity of coagulated blood which she had swallowed, and fainted. After washing her face I saw the blood issuing from the left nostril. To ascertain whether it was an anterior or posterior epistaxis, I held her nose firmly within my fingers, and was pleased to see it stop. The bystanding women having refused to hold her nose while I wrote a prescription, I called for a common clothes-pin, and, one with a spring being handed to me, I applied it to the wings of the nose,



and to my delight succeeded in arresting the hemorrhage without further interference. Of course I left it *in situ* and upon removing it ten hours after no blood returned nor has any ever since. Observing the success obtained by the clothes-pin, I devised this little instrument, had it made and perfected by Messrs. Stohlmann and Pfarre, and put it into use. The result having been satisfactory, without exception, I beg of you to call the attention, through your valuable journal, for what it may be worth, of the profession at large, and let it judge of its merit.

As you will perceive, Mr. Editor, this clamp is not intended to arrest an epistaxis of the posterior nares; but, simply, such as originating from the tip and wings of the nose, occur frequently among children and persons exposed to solar heat. The instrument, which is simple, light, and not very costly, is made of a single wire, coiled on the end *A*, and bladed on the two ends *B*. The blades are made to fit the wings of the nose, and the wires are so arranged that by straightening or curving them the pressure may be increased or diminished according to need.

If any practitioner should object to its use, owing

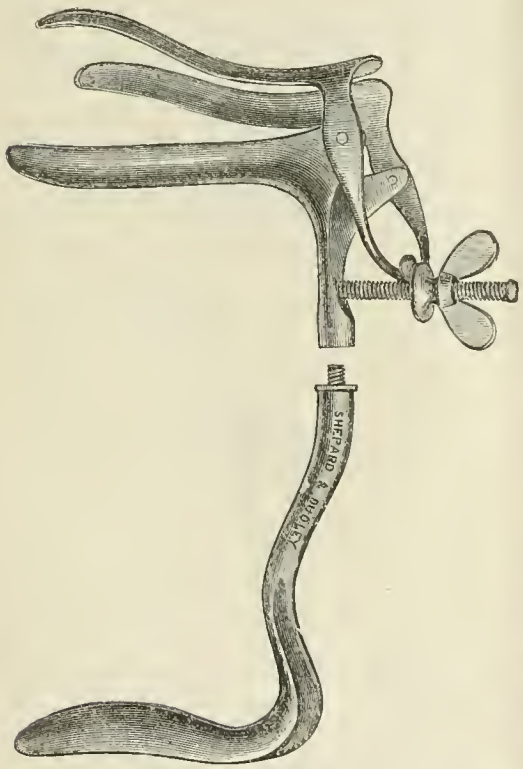
to the inconvenience of wearing it for a few hours, I may properly suggest that the insignificant unpleasantness experienced is vastly compensated; first, by the avoidance of the filthy and often inefficient use of lotions, powders, and plugging, with its unpleasant consequences; and second, by the thorough and speedy manner in which the flow of blood is arrested, and the patient made sufficiently comfortable to be enabled to attend to domestic duties, as though nothing had occurred.

129 West Fifty-third Street.

COMBINED SIMS' & NOTT'S SPECULUM.

By WALTER R. GILLETTE, M.D.

I present herewith a cut of a combined Sims' & Nott's Speculum, which was made at my suggestion two years ago, by Dr. Leonard, of Shepard & Dudley's. I think it is preferable to the instrument



recently devised by F. G. Otto & Sons. Their instrument is a solid Sims' speculum, with the flanges constituting one blade, a Nott's speculum detachable. Its use, therefore, is quite limited to the patient in the semi-prone (Sims') position, as it is extremely awkward and difficult to get the patient's hips near enough to the edge of the table in order to apply it in the supine position.

The instrument illustrated is simply Nott's modification of Cusco's speculum, with a Sims' blade and handle, which can be screwed on when needed. This blade has also Van Buren's curve, for examination of the rectum. It can be used in the supine or semi-prone position of the patient, by detaching or attaching the Sims' blade. Dr. G. S. Winston has still further modified this by making the flanges, screw, and button detachable. Removing these we have a Sims' speculum. Attaching them, and unscrewing the handle, we have left Nott's-Cusco's speculum. The instrument thus devised seems to me perfect in its economy and application.

149 West Twenty-third Street.

UTERINE LEECH AND ASPIRATOR.

By WILLIAM W. REESE, M.D.,

Brooklyn, N. Y.

The benefits resulting from depleting the neck of the uterus in most cases of engorgement or congestion, and the difficulty, delay, and uncleanliness common in the application of leeches, have led to the construction of the above-named instrument, which is found to be admirably adapted to the purposes, and free from the objections which obtain against leeches and other means heretofore employed, and which frequently induce physicians to forego the advantages of depletion, and to employ other modes of treatment less speedy and efficient, and usually more expensive to patients, because more tedious or protracted.

This instrument is a glass cylinder, 7½ inches long and about half an inch in diameter, with a well-fitting piston, through which is conducted a metallic rod with a spear-shaped point. This rod is surrounded at the outer end (handle) with a spiral spring which instantly draws it back, air-tight, into the piston after the cervix has been punctured or scarified with the point. The piston is then slowly withdrawn to any extent required, whilst the cylinder, which the practitioner keeps pressed up with one hand against the cervix, through a speculum retains the blood that follows. No wound is left like that produced by the bite of a leech, nor is any bleeding likely to continue after the withdrawal of the speculum.

A, on the figure, propels the point. *a* is a screw-cap that regulates the cutting distance by lengthening or shortening the spiral wire *B*, according to the wish of the operator. *b* is cap of the piston-rod, and *C* the cap of the cylinder. All of these caps are readily removed for cleaning any part of the instrument. The piston is graduated, in order that the quantity of blood drawn may be known without removing the cylinder.

This little instrument can be used with the same facility as an aspirator for small abscesses near the uterus, in suppuration of the tonsils, etc.

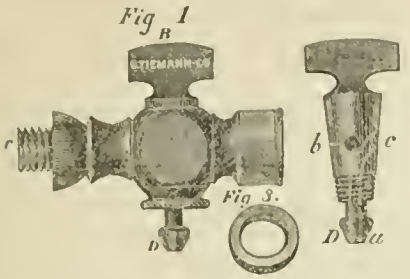
A NEW THREE-WAY STOPCOCK.

H. T. HANKS, M.D.,

New York.

The stopcock is made of hard rubber to fit any of the 4, 8 or 12 oz. Goodyear syringes. By its use the syringe is made double action, and is available as such, and for an aspirator and stomach pump. It consists of three parts, and is represented complete in

Fig. 1. The cut on the right, which should have been marked Fig. 2, represents the turn-cock. Fig. 3, the nut which holds the turn-cock *in situ*.



In using the instrument the end *C* should be fastened to the syringe, while to the opposite end, which should be marked *E*, may be attached either of the three nozzles in general use, and a rubber tube fitted to the end *D* of the turn-cock. If the instrument is to be used as a stomach pump, a suitable tube must be fastened to the end of the nozzle. If used as an aspirator, the usual rubber tubing and needle must be attached to the nozzle.

The principle of the action is at once understood by looking at the separate cut of the turn-cock. The dotted lines indicate the direction and position of a passage up through the turn-cock, from the hole *c* to the hole *a* in the end *D*. Through this curved passage fluids may be drawn in or out; or by turning the turn-cock one-quarter round fluids may be forced in or out through the hole *b*, which passes directly through the turn-cock. The two passages have no connection, and by proper management of the turn-cock may be used alternately.

I have used this instrument as aspirator and double action syringe for nearly two years.

Aug. 30, 1876.

A NEW VAGINAL DOUCHE.

By FRANK P. FOSTER, M.D.

The instrument shown in the accompanying cut is constructed as follows: a Politzer's bag (the nozzle having been removed) is inverted or squeezed in upon itself into the shape of a cup, which shape it is made to retain by means of two flanged tubes, one of which (with the flange inside the cup) screws into the other. To the outer flanged tube is attached a Davidson's syringe, furnished with a clip for securing the suction-tube to the edge of the vessel which contains the injection. To the inner flanged tube is attached, by means of a short piece of flexible rubber tubing, the nozzle of the instrument, which is a U-shaped tube of hard rubber, having an aperture near the bend and looking towards the opposite arm of the tube. An outflow-pipe is attached to the lower part of the soft rubber cup.

The particular object of the instrument is to enable a large vaginal injection to be administered without soiling the bed. The patient lying on her back, with the hips somewhat raised by means of a pad or hard cushion, the vessel holding the injection is placed in a chair or on a table by the side of the bed. The suction-pipe of the syringe having been made fast to the vessel by means of the clip, a few syringefuls of the fluid are first passed through the instrument, in order to expel the contained air. The nozzle is then introduced into the vagina, when the cup will be found to cover the vulva. The lower part of the cup is to be pressed gently, but firmly and evenly, against the perinæum, but *the upper edge of the cup should not be in contact with the patient's person*. The injection is now to be commenced by working the syringe in the ordinary way, and it may be kept up *ad libitum*, as the outflow-pipe conducts the fluid from the vagina into a vessel placed on the floor by the side of the bed for the purpose. Care should be taken that *every part* of the outflow-pipe shall be on a lower level than the lower portion of the rubber cup, and that it is not pressed upon anywhere or bent at too sharp an angle; otherwise there is danger that the fluid will overflow the

top of the cup and soil the bed. If a syphon action is preferred, it is only necessary to elevate the vessel containing the injection above the level of the vulva, when, after once starting the stream, it will be found to continue without the necessity of working the syringe.

The advantages claimed for this instrument are as follows:

(1.) It is cheap and simple, and easily worked by a nurse or by the patient herself, avoiding the unpleasantness of a bed-pan.

(2.) The injection cannot enter the uterus.

(3.) There can be no injurious distention of the vagina, as the double nozzle maintains constant patency of the vaginal orifice.

(4.) Its use does not give rise to pain, even immediately after confinement or when the parts are lacerated or inflamed.

(5.) On account of the flexible attachment of the nozzle to the cup, the instrument is perfectly efficient in cases of ruptured perinæum, even if the laceration extend into the rectum; but in that case the lower border of the cup must be held behind the anus.

I am indebted to Dr. Emmet for valuable suggestions in regard to the construction of the nozzle. As a matter of course, nozzles of various lengths, or specially fashioned in other respects, may be used to meet the requirements of particular cases.

The instrument is made by Mr. Ford, and is furnished by Messrs. Caswell, Hazard & Co.

Complete with Davidson syringe $6.50
Douche alone with three feet tubing 4.00

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from August 27th to Sept. 2d, 1876.

SMITH, J. R., Surgeon, and WOODWARD, J. J., Surgeon, designated to represent the Medical Corps of the Army at the International Medical Congress, to meet at Philadelphia on Sept. 4th. S. O. 176, A. G. O., Aug. 25, 1876.

STERNBERG, G. M., Surgeon. Assigned to duty at Fort Townsend, W. T., as post surgeon. S. O. 169, Dept. of the Columbia, Aug. 17, 1876.

GIRARD, J. B., Asst. Surgeon. Assigned to duty as post surgeon at Fort Wayne, Mich. S. O. 171, Mil. Div. of the Atlantic, Aug. 31, 1876.

By S. O. 178, A. G. O., Aug. 28, 1876, the following changes are made:

RANDOLPH, J. F., Surgeon. Relieved from duty in Dept. of the Platte, ordered to Philadelphia, Pa., and thence report by letter to the Surgeon-General.

The following officers are relieved from duty in the Department they are now serving, ordered before the Army Medical Board, New York City, for examination for promotion, and on its completion report by letter to the Surgeon-General:

DE GRAW, C. S., Asst. Surgeon, Dept. of Texas.
GARDNER, W. H., " " " the Missouri.
JESSOP, S. S., " " " " "
MILLER, G. McC., " " " Arizona.
MOFFATT, P., " " " the Missouri.

TREMAINE, W. S., Asst. Surgeon. Ordered before the Army Medical Board for examination for promotion, and on its completion return to his station.

HARVEY, P. F., Asst. Surgeon. To report to the Commanding General Dept. of Dakota for assignment to duty.

MCELDERRY, H., Asst. Surgeon. On expiration of his leave of absence assigned to duty at Fort Monroe, Va.

GIRARD, J. B., Asst. Surgeon. On expiration of his leave of absence to report to the Commanding General Div. of the Atlantic for assignment.

JACKSON, D., Asst. Surgeon. Relieved from duty in Dept. of Texas and ordered to Mil. Div. of the Atlantic.

The following named Assistant Surgeons, recently appointed, will report for duty or assignment as follows:

GARDNER, EDWIN F., to report to commanding officer Willet's Point, N. G. H., for temporary duty.

CORBUSIER, WM. H., by letter to Commanding General Dept. of the South.

BUELL, J. W., to accompany first detachment of recruits to Dept. of Texas, and on arrival, report by letter to the Department Commander for assignment.

SHUFELDT, ROBT. W., to Commanding Officer Fort McHenry, Md., for temporary duty.

APPEL, D. M., to Commanding General Dept. of the Missouri, for assignment to duty.

ANDREWS, W. C. C., to Superintendent Mounted Rec. Service, for temporary duty at St. Louis Barracks, Mo.

CUNNINGHAM, THOS. A., by letter to Commanding General Dept. of Dakota, for assignment.

BURTON, H. G., in person to Commanding officer Dept. of Arizona, for assignment.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending September 2, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Aug. 26.....	0	21	20	2	2	26	0
Sept. 2.....	0	18	12	0	1	21	0

AMERICAN GYNECOLOGICAL SOCIETY.—The first annual meeting of this society will be held in the Academy of Medicine, 12 West 31st street, New York, on September 13th, 14th, and 15th, 1876.

September 13.—Morning session at 10 o'clock. Papers: 1. Incision of the Cervix Uteri, by Dr. T. A. Emmet; Discussions by Drs. J. M. Sims, E. R. Peaslee, T. G. Thomas, and others; 2. Cicatrices of the Cervix Uteri, by Dr. A. J. C. Skene; 3. Report of a Case of Abdominal Pregnancy treated by Gastrotomy, by Dr. T. G. Thomas. Afternoon session at 3 o'clock. 4. Battey's Operation for Extirpation of the Ovaries, by Dr. R. Battey; 5. A Paper sent by Dr. J. Matthews Duncan, of Edinburgh; 6. Viburnum Prunifolium: its Uses in the Treatment of the Diseases of Women, by Dr. E. W. Jenks; 7. A Case of Abnormal Menstruation, by Dr. T. Parvin.

September 14.—Morning session at 10 o'clock. 8. Annual Address of the President; 9. A Paper by Dr. Robert Barnes, of London; 10. Spontaneous and Artificial Disintegration of Fibrous Tumors of the Uterus, by Dr. W. H. Byford; 11. Pneumatic Self-Replacement in Dislocations of the Gravid and Non-gravid Uterus, by Dr. H. F. Campbell. Afternoon session: 12. Latent Gonorrhœa, especially with regard to its Influence on Fertility in Women, by Dr. E. Noeggerath; 13. Hydrate of Chloral in Midwifery Practice, by Dr. W. L. Richardson; 14. A Case of Labor complicated with four large Uterine Fibroids and Placenta Prævia, by Dr. J. R. Chadwick.

September 15.—Business meeting at 9 A.M., with closed doors. Morning session at 10 o'clock: 15. What is the Best Treatment for Acute Lacerations of the Female Perineum, and for Lesions of the Recto-Vaginal Septum? by Dr. W. Goodell; 16. Paper sent by Mr. Lawson Tait, of Birmingham, England; 17. Cases of Cystic Tumors of the Pelvis, by Dr. G. H. Bixby. Afternoon session: 18. Masturbation in Women, with a Report of Seventeen Cases treated with Bromide of Potash, by Dr. J. R. Chadwick; 19. What is the History of Calculi formed in the Bladder after Operations for Vesico-Vaginal Fistulæ? by Dr. H. F. Campbell. Adjournment at 5 P.M.

INTERNATIONAL MEDICAL CONGRESS.—We shall endeavor to commence our report in the next number.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, September 16, 1876.

INTERNATIONAL MEDICAL CONGRESS.

THE International Medical Congress at Philadelphia has proved, as we expected, a success. A large number of delegates were present, and their deliberations were of a character to do honor to the occasion. International Congresses are as yet in their infancy of usefulness, and it must be no small congratulation for such as are interested in the discussion of general questions relating to medical progress, that some effective step is taken in the required direction to show that each meeting is an improvement upon its predecessor. The meeting in Philadelphia can safely be said to take up the spirit of the former Congress and propagate it further on towards the realization of tangible and practical results. Differing somewhat from other gatherings of its sort in being the occasion of a centennial jubilee, there was, however, a becoming diguity in all the proceedings which referred to such an occasion. The addresses were, without exception, models of their sort. The historical element of which they partook was eminently in proper keeping with the spirit of the meeting, and reflected great credit upon the good taste and discrimination of the orators. The address of welcome was singularly appropriate, foreshadowing, as it did, the work expected to be accomplished by the Congress, and giving the direction of effort that wide range which was in keeping with the character and extent of the representation.

We are gratified to note that the suggestions concerning uniformity in medical observation, as offered by the President, were so intelligently acted upon by the meeting. The endorsement of the principle involved in this question was all that could be expected of the Congress under the circumstances, and in so far some real progress has been made in the right direction. The discussion of the subject is thus encouraged, and by and by the practical results will show themselves in the shape of some well-digested and practical plans. The time will yet come when there will be but one medical language over the entire world, but our enthusiasm for its hasty accomplishment must be tempered with the patient investigation of those means which will best insure the end.

There were other general questions which might have come up for discussion, but, as we before remarked, Medical Congresses are as yet mere experiments, and we must for the present be satisfied with a promising beginning. The other general questions, the discussion of which would belong to such a representative body of medical men, have not perhaps been sufficiently discussed to warrant attention as yet, but we are convinced that the professional mind is getting ready to attack them, and that before long the legitimate work of an International Medical Congress will be as systematically mapped out as that of any other smaller society. The material for the work is at hand; all we have to do is to learn to use it.

The large attendance at the meeting and the widespread character of the representatives showed the general interest manifested in such gatherings. The success of the meeting at Philadelphia will add not a little to this interest, and we hope to see it stimulated still more at the meeting in Geneva.

The arrangements in Philadelphia were carried out in a manner that reflected credit upon the committee having it in charge. Everything was calculated for, and, despite the multitude of interests to be consulted, as far as we can learn every one was satisfied with the character and scope of the programme. If any suggestion for improvement in management might be made, it would refer to the more systematic apportionment of time to the different sections. It would seem that, with the time devoted to the sections, some arrangement might be made to give some longer sessions than others in proportion to the number and extent of the subjects to be discussed, and as far as possible to have the more important sections meet at different hours. As it was, the uniformity of the hour of commencement caused all the sections to be in full operation at once, and those interested in the discussion of many subjects were necessarily restricted to one. Everything considered, however, it was probably the best that could be done under the circumstances, and, far from finding fault, it is a matter of surprise that the complicated machinery moved so harmoniously, and so well met the general expectations of the delegates. The election of the officers will meet with very general satisfaction. The honor of president was worthily conferred, and met the expectations of every delegate present. The offices of vice-president were very judiciously distributed, and infused a truly international element into the election.

The Congress was distinctive in its character in many respects. Its very organization, or rather mode of constitution, elevated it above every other national society or

association in its capacity for usefulness. It was composed of delegates from national and State societies only, so far as the United States were concerned, and its representatives from abroad were men of culture and refinement. None of the quarrels of minor societies could find a place in its deliberations. It was thoroughly cosmopolitan in its objects, and though the transatlantic world sent comparatively few of its medical men to participate in it, the score or more who had the courage to cross the ocean gave a thoroughly international character to the Congress, and an additional interest to the discussions. Our neighbors of the Dominion were there in respectable numbers, and seemed gratified with the prospect held out to them, by the recent international conference in Philadelphia of committees of the Canadian and American Medical Associations, of annexation of those two bodies, and annual interchange of friendly greetings.

We invite special attention to the report, which we publish elsewhere, of the proceedings of the Congress. It has been our object to give our readers a faithful record of an event in which so many thousands of the profession are interested; and we have not hesitated, therefore, to allot to it a liberal share of space in our columns. The occasion is a very unusual one, and the instruction to be derived from a perusal of the abstract of the proceedings, extraordinary in amount and in degree. The Congress threw open its doors widely to the public and to the public press for four days of its sessions; but on the fifth day adopted a very unwise and unnecessary resolution in regard to the reporting of its proceedings, which to us came in the light of an *ex post facto* law, after the reports of the first three or four days were already in type. The resolution, which will be found in another column, was offered by one of the most respected members of the Congress, at the suggestion of another member, without, we presume, due consideration of all its bearings. Its object was apparently to prohibit all publications in medical journals of papers and addresses "in abstract or otherwise," plausibly because they might interfere with the sale of the volume of Transactions. Whatever the motive, personal "or otherwise," for the introduction of such a resolution, or whose fertile brain originated it, or whether some medical journal of feeble enterprise suggested it as an apology for failure to convey to its readers a satisfactory record of the Congress; it seemed almost an act of self-stultification on the part of that learned body, after hundreds of copies of the outlines, as elaborate as abstracts, of all the important papers had been published and liberally distributed by the Centennial Medical Commission, and after the reporters of the public press had been allowed every privilege at the hands of the Congress, with full license, if they so desired it, to publish phonographic reports of every paper read before the Congress, or any sectional portion of it. We shall closely scan the columns of our contemporaries, and if we find in any of them a meagre report combined with a virtuous diatribe against those who have not obeyed the unreasonable behests of the Congress, we shall be able to draw our own inferences. Without discussing the rights of the public press, medical included, on all public occasions in which the doors are thrown widely open to every comer and to every listener, we feel assured that a general notice of the Congress, which excites the interest of the profession at large by such abstracts as those we publish to-day, will stimulate a widespread curiosity to see and to possess the complete Transactions when the volume issues from the hands of the Committee of Publication. We do not envy them the task they have before them, although the material upon which they have to work is of an unusual order of merit.

Progress of Medical Science.

Easy Method of Extracting a Broken Catheter from the Urethra.—Dr. Young was recently called to a patient about eighty years of age, who was suffering from retention of urine, caused by the breaking in the urethra of a No. 8 silver catheter which he had been in the habit of using. The point of breakage was beyond the beginning of the curve, and it presented two sharp pointed spicula, three-eighths of an inch long. On external examination the urethra was tender; the broken portion of the catheter lay about seven inches from the meatus, and was movable only in the direction of the bladder. Dr. Young took the eyes off a No. 11 catheter and passed it down to and over about an inch of the broken end, when, on making an angle with No. 11, No. 8 became locked and was easily withdrawn. This method of extraction may be employed, with modifications, in removing other foreign bodies. On fixing the object to be removed, by external pressure, the tube slides easily over it, and it can be extracted by manipulation without wounding the mucous membrane.—*British Medical Journal.*

Subcutaneous Division of the Femur.—On May 16, 1876, Mr. Richard Davy divided the femur subcutaneously (after Langenbeck's method on the tibia) for bony anchylosis of the ileo-femoral joint in a boy aged fourteen. The right femur was flexed on the abdomen at an angle of 90°, the angle being measured at the anterior superior spine of the ilium; the femur was also adducted so that the legs crossed; the genitals were partially eclipsed, and the right inguinal fold deepened. A small cut was made down to the anterior plane of the femur, immediately below the trochanters; the commencing shaft was drilled through and through this opening, a keyhole saw almost effected division of the femur by right and left movements; complete division was caused by periosteal fracture. The limb was at once abducted, straightened, and placed symmetrically; correct position was maintained by splint and sand bags. The young fellow progresses without any unfavorable symptom, and bony union in the re-formed position is being accomplished by nature.—*British Medical Journal.*

Reports of Societies.

PROCEEDINGS OF THE INTERNATIONAL MEDICAL CONGRESS.

This body, composed of delegates from foreign medical societies, and from national and State medical organizations of this country, together with distinguished invited guests from abroad, met at Philadelphia, Monday, September 4th. The general sessions were held each morning of the week to Saturday, September 9th, inclusive. Five afternoons were devoted to the meetings of sections, of which there were nine: Medicine, Biology, Surgery, Dermatology and Syphilology, Obstetrics, Ophthalmology, Otology, Sanitary Science, and Mental Diseases. About four hundred and fifty delegates and invited members were present.

ADDRESS OF WELCOME.

The session was opened by Professor Samuel D. Gross, M.D., D.C.L. Oxon., President of the Centennial Medical Commission. After prayer by the Right Rev. William Bacon Stevens, Bishop of Pennsylvania, Prof. Gross delivered the address of welcome to the Congress. He greeted them in the name of the entire American medical profession. The occasion, he stated, was an unusual one. Everything had been fully discussed, and time and labor thoughtfully and earnestly bestowed by the Commission, to perfect the organization of the Congress. It was at all times a gratification to welcome friends, but the feeling was vastly heightened by the fact that so many distant parts of the world were represented—Europe, the far East, Japan, China, etc. So far as known, every prominent medical society, and every distinguished medical man had received invitations. It was a glorious spectacle to see men laying aside their ordinary pursuits, crossing vast continents and perilous seas, to unite with us in celebrating our first medical centennial, and interchanging views and observations, laying the results upon a common altar, for the common good. No other congress ever had such a cosmopolitan outlook. It would exhibit what America had accomplished in a century in scientific work. Time was when we had no American medical literature or medical science; we were dependent on Europe until after this century opened. The addresses to be delivered by some of the best medical men of the country would show the completeness and rapidity of our progress. The period of medical provincialism has long since passed.

The speaker then alluded to the desirability of establishing a uniformity of nomenclature, weights, measures, and records of disease; to the modern improvements in the use of the microscope, chemical analysis, clinical observation, and experiments on inferior animals. Much could be done by this Congress for the advancement of medical science and international unity, strengthening the bonds and securing the co-operation of its votaries in various portions of the globe. It was well for men of different nationalities to come together to look each other in the face, and see what they have done to further the interests of scientific progress and to lighten the burden of human suffering, to interchange kindly feelings, to form new friendships, and cement old ties. Such international reunions should be more frequent and more numerously attended. After incidentally alluding to the Exposition, and suggesting that the Congress should perfect its organization by the election of its own officers, Prof. Gross declared the sessions formally opened.

COMMITTEE OF NOMINATIONS.

The President then announced the following Committee of Nominations, named by the Commission, which was, on motion, confirmed by the Congress: Mr. William Adams, London; Prof. Engelsted, of Copenhagen; Prof. Hüter, of Greifswald; Prof. Rudnew, of St. Petersburg; Dr. J. A. Grant, of Ottawa, Canada; Dr. Henry I. Bowditch, of Boston; Prof. L. A. Dugas, of Augusta, Georgia; Prof. J. T. Hodgen, of St. Louis; Prof. Christopher Johnston, of Baltimore; Prof. Austin Flint, Sr., of New York; Dr. W. S. W. Ruschenberger, U. S. Navy; Dr. Joseph R. Smith, U. S. Army; Dr. Edwin M. Snow, of Providence, R. I.

ADDRESS ON MEDICINE.

Professor Austin Flint, of New York, then delivered the Address on Medicine. After a few introductory remarks, he alluded to the potential agency exercised by the medical men of the country during and after the Revolutionary period; to the germination of medical literature at that time, and the foreshadowing of medical schools. He next referred to the practice of inoculation, and the pulpit denunciation of its sinfulness. Medical progress was signal after the war of independence. Two rival schools were soon in existence, and some interesting facts were detailed by the writer, of pecuniary contributions to schools and to the interests of medicine, the foundation of prizes at Harvard, etc. The medical schools of Philadelphia were modeled after that of Edinburgh. Cullenism prevailed, but was not long maintained, although it regulated practice, especially in the hospitals. After speaking more particularly of the physicians and surgeons of Philadelphia at that date, he alluded to the good work done in the provincial schools, which often supplied professors to the larger institutions of learning. Subsequent increase of the schools was not in proportion to the population, the number being scarcely greater now than in the early part of this century.

The part early taken by medical journals in contributions to medical literature, the characteristics and effects of Dr. Benjamin Rush's writings, the attachment of medical men of this country to the medical literature of Great Britain, even after the war of 1812, and the formation of medical societies in the early part of the century, were all referred to. He then alluded to the introduction of vaccination and the opposition it encountered. In 1814 the plans for the first American National Pharmacopœia, that of 1820, were laid. The next quarter of the century saw the discovery of ether as an anæsthetic; and the improvement of histological research, the translation of Bichat's work paving the way. Dr. Gross, early in his medical career, was identified by his writings with the study of pathological anatomy in this country; so also Dr. J. B. S. Jackson. Auscultation and percussion in this quarter also came into general use in the United States through the translation of Laennec and writings of James Jackson, Holmes, and others. Its literature, and that of the physical exploration of the heart, were sketched by the speaker.

Bright's history of cases in 1828, introduced to general attention here, was followed by great progress in this form of pathology ever since. In 1828 the *American Journal of the Medical Sciences* was first published. Dr. Flint then alluded to the discoveries

in the nervous system in this country, and the papers written upon them; to Beaumont's researches on digestion in the case of gastric fistula of Alexis St. Martin; to the views and literature of Broussaism, which fell and left no "ism" as its successor; to John Esten Cook and the heroic calomel treatment of his day; to the views of Louis on phthisis and yellow fever; to the self-limited nature of diseases, as advocated by Dr. Jacob Bigelow in 1835; to the decay of polypharmacy and the progress of expectant medicine. The *United States Dispensatory* was published in 1833; the American Medical Association was founded in 1847.

The speaker then detailed the chief works on practical medicine during the second quarter of the century, with sketches of the labors of Dr. Nathan Smith, James Jackson, J. K. Mitchell, Drake, and others. The general introduction into this country of quinine was referred to, and also the contributions to the literature of yellow fever, croup, infantile therapeutics, affections of the brain, nervous system, air-passages, etc. The use of topical applications to the larynx, and of opium, the early employment of suction from the pleural cavity, now called aspiration, all belong to the history of American medicine. He then gave a brief list of some of the authors of this quarter, and the names of those who have died.

The third, or last quarter of the century is familiar to most of us. The great characteristic of progress in the United States at this epoch is in histology. Its influence on prophylaxis and practice were alluded to. After referring to the advantages of an international copyright for our own protection, and to the advanced position of American medical literature, and its recognition abroad, he declared that the chief characteristic of our medical schools, in spite of all cavil, was practical teaching. In conclusion, he dwelt on the good influences of the Code of Ethics of the American Medical Association, and to the elevated social position and public influence of the medical profession in this country.

Dr. Gross called attention to the fact that the speaker had modestly omitted all mention of his own (Dr. F.'s) contributions to American medical literature.

On motion of Dr. J. P. White, the thanks of the Congress were tendered to both gentlemen, and their addresses referred to the Committee of Publication.

OFFICERS OF THE CONGRESS.

The Committee of Nominations then reported the names of the following gentlemen for permanent officers of the Congress, all of whom were elected:

President: Professor Samuel D. Gross.

Vice-Presidents: Prof. Paul F. Eve, of Tennessee; Mr. Joliffe Tuffnell, of Ireland; Drs. W. L. Atlee, of Pennsylvania; C. Lange, of Denmark; J. B. Johnson, of Missouri; F. Semeleder, of Austria; Dr. Hunter McGuire, of Virginia; Dr. Johan Hjort, of Norway; Dr. T. G. Richardson, of Louisiana; Dr. Wm. H. Hingston, of Canada; Dr. J. P. White, of New York; Dr. H. Miyake, of Japan; Prof. Nathan R. Smith, of Maryland; Prof. Rudnew, of Russia; Dr. Joseph M. Toner, of Washington; Prof. Hueter, of Pomerania; Dr. G. L. Collins, of Rhode Island; Dr. R. F. Hudson, of Australia; Dr. Henry Gibbons, of California; Dr. P. Debasieux, of Belgium; Dr. N. S. Davis, of Illinois; Mr. William Adams, of England; Dr. L. A. Dugas, of Georgia; Prof. A. R. Simpson, of Scotland; Dr. J. K. Bartlett, of Wisconsin.

Honorary Vice-Presidents: Surgeon-General J. K. Barnes, U. S. Army; Surgeon-General Joseph Beale, U. S. Navy.

Treasurer: Dr. Caspar Wister, of Pennsylvania.

Secretary General: Dr. I. Minis Hays, of Pennsylvania.

Secretaries of Meetings: Drs. W. B. Atkinson, Richard J. Dunglison, R. A. Cleemann, W. W. Keen, R. M. Bertolet.

OFFICERS OF SECTIONS.

Medicine. *Chairman.*—Alfred Stillé, M.D., Philadelphia; *Vice-Chairmen.*—R. P. Howard, M.D., Canada; J. J. Woodward, M.D., U. S. A.; *Secretary.*—J. Ewing Mears, M.D., Philadelphia.

Biology. *Chairman.*—John C. Dalton, M.D., New York; *Vice-Chairmen.*—Austin Flint, Jr., M.D., New York; F. W. Campbell, M.D., Canada; *Secretary.*—James Tyson, M.D., Philadelphia.

Surgery. *Chairman.*—Prof. Joseph Lister, Edinburgh; *Vice-Chairmen.*—J. A. Grant, M.D., Canada; John Ashhurst, Jr., M.D., Philadelphia; *Secretary.*—John H. Packard, M.D., Philadelphia.

Dermatology and Syphilology. *Chairman.*—James C. White, M.D., Boston; *Vice-Chairmen.*—S. Engelsted, M.D., Copenhagen; Edward Shippen, M.D., U. S. N.; *Secretary.*—A. Van Harlingen, M.D., Philadelphia.

Obstetrics. *Chairman.*—Robert Barnes, M.D., London; *Vice-Chairmen.*—Prof. Alex. R. Simpson, Edinburgh; W. H. Byford, M.D., Illinois; *Secretary.*—Wm. Goodell, M.D., Philadelphia.

Ophthalmology. *Chairman.*—R. Brudenell Carter, F.R.C.S., London; *Vice-Chairmen.*—Wm. Thomson, M.D., Philadelphia; Henry W. Williams, M.D., Boston; *Secretary.*—John Green, M.D., St. Louis.

Otology. *Chairman.*—Clarence J. Blake, M.D., Boston; *Vice-Chairman.*—A. H. Buck, M.D., New York; *Secretary.*—H. N. Spencer, M.D., St. Louis.

Sanitary Science. *Chairman.*—Stephen Smith, M.D., New York; *Vice-Chairman.*—J. S. Billings, M.D., U. S. A.; *Secretary.*—E. M. Hunt, M.D., New Jersey.

Mental Diseases. *Chairman.*—John P. Gray, M.D., New York; *Vice-Chairmen.*—E. Grissom, M.D., North Carolina; I. Ray, M.D., Philadelphia; *Secretary.*—Walter Kempster, M.D., Wisconsin.

COMMITTEE ON PUBLICATION, WITH POWER TO SELECT CHAIRMAN AND EDITOR.

John Ashhurst, Jr., M.D., Philadelphia; R. J. Dunglison, M.D., Philadelphia; Wm. Goodell, M.D., Philadelphia; James H. Hutchinson, M.D., Philadelphia; Caspar Wister, M.D., Philadelphia.

The Congress then adjourned.

PUBLIC RECEPTION BY THE PROFESSION.

In the evening a public reception was given the Congress by the medical profession of Philadelphia at Judges' Hall, Centennial Grounds. About six hundred persons were present. The evening's entertainment was concluded with a collation at the Lafayette Restaurant in the same grounds.

DAILY REPORTS FROM THE SECTIONS.

On Tuesday, at ten o'clock, after the reading of the minutes, the reports of Sections were called for, and the conclusions arrived at by them submitted to the Congress. After the adoption of the conclusions voted on by the Sections of Dermatology, Sanitary Science, and Otology, and their reference to the Committee of Publication, Dr. T. G. Richardson, of Louisiana, moved that the Congress is not responsible for these conclusions, all responsibility being with the Sections themselves.

Dr. Hays stated that previous International Congresses abroad had voted to sustain or reject the conclusions adopted by the Sections.

Dr. Davis, of Chicago, was of the view that these reports should only be accepted and referred to the Committee of Publication; and an amendment to that effect was appended to the previous motion, and with it adopted.

On motion of Dr. Brodie, of Michigan, the action of the Congress in confirming the conclusions reported by the Sections was reconsidered, and their reports accepted and referred.

The other sections having reported, various invitations were read by the Secretary; also greetings from St. Petersburg Medical Society and the University of Christiania, Norway.

THE NATIONAL MEDICAL LIBRARY.

Resolutions complimentary to the Surgeon-General and his assistants, and recommending action on the part of this Congress in a direct appeal to the National Congress for encouragement of their labors, and specially in the publication of the valuable catalogue of the National Medical Library, were offered by Prof. Flint, and adopted.

ADDRESS ON HYGIENE AND PREVENTIVE MEDICINE.

The hour of eleven arriving, Dr. H. I. Bowditch then read the address on Hygiene and Preventive Medicine, Vice-President Eve in the chair. He divided the century into three irregular periods: 1776 to 1832, the age of theory merely, and of medical system-making; 1832 to 1869, that of strict observation and accurate recording of facts, but of great skepticism; 1869 to 1876, the age of progress in State preventive medicine. In the first epoch, Boerhaave, Cullen, and Rush flourished. He gave a sketch of Rush, and of the rise and fall of Broussaism.

The second epoch was that of Louis and his disciples. The part taken by Jacob Bigelow, Elisha Bartlett, and John Forbes was referred to. The medical profession did not take much interest in State preventive medicine; progress in it was due more to the laity than the profession, especially to Lemuel Shattuck, of Boston, and Edwin Chadwick, of England. The Massachusetts Sanitary Commission Report in 1825 fell flat, but its recommendations were adopted in 1869. The speaker then alluded to a variety of subjects—the labors of Europeans, of sanitary journals and writers, especially in England, with her trained inspectors, the United States Army and Navy service, the Surgeon-General's library, the various Sanitary Commissions of the late war, the quarantine conventions that met before the war, the effect of the war in disciplining the surgeons to systematic prevention of disease by the enforcement of sanitary measures, the establishment of the American Public Health Association in 1872, and of the Social Science Association, the efforts of the American Medical Association, etc.

PRESENT SANITARY CONDITION OF THE UNITED STATES.

To determine the present condition of sanitary progress, Dr. Bowditch sent inquiries to one hundred and sixty-seven men of intelligence, living in thirty-eight States and nine Territories, covering twenty-five degrees of latitude and forth-seven degrees of longitude, and occupying every phase of climate. Some of these replies, arranged according to States, may be briefly given:

1. Does the State duly appreciate and care for the health of the people? 34 nays, 8 yeas.

2. Is the State willing to spend money to establish a State Board for various beneficent purposes cited? 36 nays, 10 yeas. In some States these boards are established, but no money is appropriated.

3. Is the State willing to spend money for investigation of preventable causes of disease? 30 nays, 12 yeas. In Massachusetts ten thousand dollars were appropriated last year to check the pollution of streams.

4. Is the State willing to spend money for prevention of noxious trades? 26 nays, 14 yeas. Brighton, Mass., once the centre of numerous offensive slaughter-houses, is now a beautiful and fashionable spot, since these were got rid of.

5. Is the State willing to take measures to prevent the adulteration of food? 23 nays, 16 yeas.

6. Has the State any Board of Health? has it a properly organized set of correspondents? No perfect set exists in any State. There are twelve State Boards of Health altogether.

7. Has the State a law for the registration of vital statistics, for irrigation, prevention of disease, sanitary survey, etc.? 40 nays, no yeas.

8. Has it a law for the registration of marriages, deaths, etc.? 16 nays, 20 yeas; eighteen of the latter being qualified, stating that the law is imperfect, a dead letter, carried out in the large cities only, etc.

9. Has it any law in regard to drainage of lands? 24 nays, 7 yeas; but in the latter the drainage is for agricultural, not sanitary, purposes.

10. Has it a law for introduction of water into cities? 23 nays, 14 yeas; but there is no law to insure the purity of the water.

11. Has it any law in regard to contagious diseases? 16 nays, 21 yeas. There should be a national law for enforcement of vaccination, and every foreign nation should adopt it. An international code of health must come sooner or later.

12. Has it taken any action in regard to the use of well-water, etc.? In one hundred and forty-eight towns eighty-two wells were reported, the water in the rest being derived from rivers. Two-thirds of the people of the United States are living in total disregard of all knowledge or interest in the kind of water they are using.

13. Has it any regulation for the disposal of sewage? Only one-fifth have any definite idea that any action is necessary.

14. Has the State, county, or city published health reports? Three-fourths of the States ignore the matter.

15. Is there any known law of development or partial development of disease to give as a legacy to the next century as a preventive? 39 nays and 6 yeas. Special points are mentioned as to the development of zymotic diseases, modes of prevention, etc.

Our present duty is organization. Two hundred thousand persons are annually slaughtered in the States by preventable diseases. The speaker concluded by expressing great hopes of the future, and of the coming century in the increased health, and the lengthening of human life it was sure to bring with it.

ADDRESS ON MEDICAL CHEMISTRY AND TOXICOLOGY.

Prof. T. G. Wormley, of Ohio, then read the address on Medical Chemistry and Toxicology. He alluded to the prominent chemists of the century, to the relations between pharmacists and physicians; to the early foundation of medical schools in Philadelphia, in which chemistry was taught, as by Dr. Rush and by Dr. Dexter at Harvard; to the gradual but slow

advance made in chemical research at that time; to the discoveries of Drs. Robert Hare, J. Redmond Coxe, and others; the establishment of the Philadelphia school of Pharmacy in 1821, and the various changes in the professorships of that institution; to the establishment of the *American Journal of Pharmacy* in 1825, and of the second school in New York in 1829, etc.

Of the American chemical contributions to medicine, he cited the investigations of the properties of indigenous plants, as sanguinaria, and the discovery of its alkaloid, identical with that afterwards discovered in chelidonium majus. Lobelia and veratrum viride, and their alkaloids, were also referred to, with a historical sketch of the investigations into all these subjects; also the history of the manufacture and introduction into practice of chloroform, or spirits of chloric ether, as it was then called. Allusion was made to the employment and preparation of nitrous oxide, and to the discovery of the anæsthetic effects of ether, chloroform, and nitrous oxide; to Dr. Draper's investigations into urea; and those of Dr. Austin Flint, Jr., on cholesterine and stercorine.

Toxicology was then touched upon, arsenic being first mentioned, the fact being stated that in the early part of the century it was impossible to detect less than one grain of the substance. The names were given of various chemists who contributed to the subject of toxicology of arsenic at this and a somewhat later period, as Drs. Dana, J. K. Mitchell, Wm. R. Fisher, J. Lawrence Smith, Gardner, of Virginia, and J. C. Draper. Opium and strychnia have also been studied with valuable results by American chemists, so far as tests are concerned; so also digitaline, atropia, woorara, etc., as investigated by Hare, Percy, Hammond, S. W. Mitchell, James Blake, and others. The discoveries of morphia, and other alkaloid principles enabling the practitioner to prescribe medicines in concentrated forms, the processes of extracting the alkaloids, their solubility in ether, the study of crystalloids and colloids, the discovery of minute tests for strychnia and other alkaloids, of spectrum analysis with the spectroscope and microspectroscope,—all these points were dwelt upon in their relations to the study of toxicology in America. He also referred to the rapidity of action of poisons, as shown by Blake's experiments, and the conclusions derived from the Palmer poisoning case in England, in 1856; to the mode in which poisons destroy life, and to the slight physical and chemical changes in that fluid that result from their introduction. This valuable address concluded with allusions to the importance of a more general study of toxicology, and to the advantages to be derived from it.

DISTRIBUTION OF THE REPORT ON HYGIENE.

On Wednesday morning, President Gross in the Chair, on motion of Dr. John L. Atlee, the Secretary was instructed to send copies of Dr. Bowditch's address on Hygiene, when printed, to the Governors of the various States, for transmission to the Legislatures. The same action was, on motion of Dr. Trenholme, of Canada, authorized to be taken with the Dominion Government and with each province of the Dominion.

On motion of Dr. Traill Green, Dr. Wormley's address on Medical Chemistry, etc., was referred to the Committee of Publication, and the name of Dr. W.'s wife, who had prepared all the engravings of his work on Micro-Chemistry, enrolled among the members of the Congress.

The Secretary-General reported three hundred and eighty-two names on the Register; and read invitations from various sources, among others, from the National Temperance Association at New York, inviting the Congress to give a public declaration in regard to the effect of alcohol as a beverage and a medicine, and calling attention to its evil effects. This was received and laid on the table.

THE INTERNATIONAL CONGRESS OF 1877.

The Reports of Sections were then read, and the following resolutions, introduced from the Section on Medicine, adopted:

Resolved, That the International Medical Congress of 1876 recognize the advantages which would accrue from the introduction of a gradual uniformity in the multiple and heterogeneous elements of physic, as posology, nomenclatures, etc., and in the means and records of medical observation.

Resolved, That in consequence, this Congress authorizes the President to appoint delegates to the International Congress of 1877, with the special mission of presenting a schedule of the means of uniformity in physic actually applicable in all countries, and another of those which could soon be made acceptable by the profession at large.

Resolved, That the said delegates be advised to invite the co-operation of the men who have already worked for the same cause at the International or National Medical or Pharmaceutical Congresses of Paris, Vienna, St. Petersburg, and Brussels.

THE ADDRESS ON SURGERY.

Prof. Paul F. Eve, of the University of Nashville, then read the address on Surgery; Prof. Rudnew, of Russia, in the Chair.

The speaker alluded to the fact that the necessity of education abroad at first gave us no national medical characteristics. He then alluded to the various surgeons that had given America a reputation in this great field. He began with Physick, whose career he sketched, together with his improvements in surgical operations and appliances, as the tonsillotome, etc., the treatment of inflamed joints by perfect repose in coxalgia, spinal affections, etc. He mentioned a case of numerous calculi, one thousand in all, removed at one time by him from the same patient. He never spilt a drop of blood unnecessarily or wasted a word in his lectures.

He then sketched briefly the professional services of Physick's four contemporaries, Warren, Mott, Dudley, and Gibson, whose average age at death was eighty-three. Warren was the first to operate with a patient under the anæsthetic effects of ether. He himself contended that his tapping the pericardium in a case of dropsy was the first on record. He was the first to close fissure in the vault of the mouth. Valentine Mott was noted for the boldness of his operations; he was the first to ligate successfully the common iliac; the first to exsect entirely the clavicle, tying forty arteries in an operation lasting four hours; the first to exsect the entire inferior maxilla. He tied the carotid fifty-one times, and amputated about one thousand limbs. No surgeon, living or dead, ever performed so many great operations. He operated whenever there was the slightest prospect of benefiting his patient.

Dr. Benj. Winslow Dudley paid special attention to preparing his patient for operation by attention to his chylopoietic viscera, etc. He claimed to be the first to relieve intracranial aneurism by tying the carotid; he was a master of the bandage; a great lithotomist, although the statistics of his operations have been lost. Gibson was a splendid lecturer, and

illustrated his lectures with beautiful models; he first tied the iliac artery for gunshot wound in the streets of Baltimore, the patient living thirteen days. He twice performed the Cæsarian operation successfully on the same patient, Prof. Jos. Pancoast having had a similar experience.

Dr. Andrew Wood Smythe, of New Orleans, in 1864 tied the carotid and vertebral arteries, and the patient lived ten years, dying of a second operation on the mammary artery. The ligation of the vertebral artery has been done by several. Dr. Cogwell, of Hartford, in 1803 first tied the common carotid. Until Dr. Gross published this fact, Sir Astley Cooper had all the credit of it. Dr. Wm. T. Briggs, of Nashville, was the first to apply two ligatures to the internal carotid. Prof. Post, in 1817, first successfully tied the subclavian, others abroad having failed.

Dr. W. Stone first applied metallic ligatures to a wounded artery. Dr. S. W. Gross has shown the comparative innocuousness of applying ligatures to veins. The practice of ligation of vessels for the relief of gangrene is of American introduction. Arterial compression was long known in this country. The employment of the Hunterian method of ligation as a means of prevention, or for the relief of destructive inflammation, was proposed in the United States. Dr. Carnochan first ligated the femoral for elephantiasis, and afterwards, in the same case, the external iliac, successfully. Dr. Jonathan Knight was the first to treat popliteal aneurism successfully by digital compression.

The speaker then alluded to the successful methods of treatment proposed and employed by American surgeons in varicocele, affections of the bones and joints, etc., etc. Dr. Daniels, of Georgia, first introduced extension by weights and pulleys in fractures. A more detailed allusion was made also to the various modifications of fracture apparatus devised in this country, also to the efforts to overcome deformity in fractures, although, with most American surgeons, Dr. Eve believes that the os femoris, when fractured at certain points, cannot be extended to its full normal length and so maintained, without impairing its nutrition.

Manipulations for reduction of fractures by Dr. Wm. R. Reed is called by Mr. Spencer, the American or circumduction method. The discovery of the anæsthetic effect of ether in its relations to surgery was referred to, and also the important diagnostic sign described by Dr. L. A. Dugas, of Georgia, by which absolute distinction was readily made between fracture and dislocation at the shoulder. Allusion was also made to the various modifications of splints, to the services of Dr. J. Rhea Barton and J. Kearney Rodgers, in resection and exsection—the former, according to Erichsen, performing the first resection for bony anchylosis. Dr. Mussey, in 1837, performed excision of the whole scapula. Dr. Brainard, of Chicago, took the prize of the American Medical Association on the subject of perforation of the bones as a surgical expedient. Barton, Brainard, and Buck were the first satisfactorily to relieve osseous deformities. Various other cases of resection of special bones were referred to, the resection of a portion of the coccyx for neuralgia, Sayre's numerous cases of successful resection of the femur, the employment of tenotomy, etc.

Dr. Mott founded the first orthopædic hospital in this country. Dr. Sayre has done more work in this department than any other person. Reference was also made to the operations of Americans for contracted limbs, congenital deformities, operations for exsection of the kidneys and on the genito-urinary apparatus, on the air-passages, etc. Primary amputation at the hip-joint for wounds was first successful in 1806. Three or four successful cases are reported in the late war; previously in foreign wars all had failed. If not for the record of these successful cases, says von Langenbeck, the Prussian Surgeon-General, it is doubtful if the operation would not have been prohibited.

The use of silver wire by Sims in uterine surgery was also referred to. Numerous other operations, as detailed by Dr. Eve, shed lustre on American surgery. He then alluded to the contributions made by surgeons to medical literature; to the labors of the Surgeon-General of the Army and his assistants, and to the mortality of the medical officers of the army during the late civil war, as being greater in proportion than that of any other branch of the service. Seventeen thousand operations had been performed by them. He mentioned the foreign tributes to the labor of the medical service during the war, during which they said they did the work of a century.

THE ADDRESS ON MEDICAL BIOGRAPHY.

Dr. Joseph M. Toner, of Washington, D. C., then read the address on Medical Biography, Vice-President L. A. Dugas in the chair. He detailed the names and services of physicians distinguished during the century. The address was chiefly a compendious abstract of a voluminous paper, which will be published in the volume of Transactions, being full of biographical details that could not appropriately be read before the Congress. He divided the noted medical men into those of national, and those of local or State reputation merely, giving a hurried sketch of many of these, and selecting such only for special notice as were distinguished for high endowments, incessant application to study, etc., beginning with those of general professional reputation, Rush, Mott, Physick, the Warrens, Drake, Nathan Smith, Massey, James Jackson, Chapman, Beck, and a score or more of others. He then alluded by name to the various medical authors of the country, and to the value of their literary services. Sixty-five thousand physicians died during the century. The States were then taken up individually, beginning with California, and the names and services of the prominent medical men briefly referred to. No mere abstract can give an idea of the voluminous facts embraced in this valuable statistical paper.

THE ADDRESS ON THE ARMY MEDICAL WORK.

In the evening, in the hall of the Jefferson Medical College, Dr. J. J. Woodward, U. S. Army, gave a very interesting lecture, prepared at the request of the Centennial Medical Commission, on "The Medical Staff of the United States Army, and its Scientific Work." He alluded to the numerical strength of the army, the number of permanent detached posts, exposed as some of them are to malarious influences and Indian conflicts, the duties of medical officers, their supervision of all sanitary matters connected with them, of wounds, etc.

He sketched the nature of all the papers and reports connected with the medical service. 200,000 had died of sickness during the war; 100,000 of wounds. 16,000 volumes of manuscript record books, and many tons of papers of all kinds, came back to the Surgeon-General when the hospitals were closed after the war, all of which had to be examined and analyzed. It would

have been a great national crime not to have done so, and not to have extracted from them the immense amount of material they contained for scientific and useful purposes. No great national medical library existed at the beginning of the war; nor was there any great pathological museum. Valid reasons for the establishment of each at Washington, under national auspices, were given by the speaker. The whole medical staff of the army had contributed to both, but the heavy labor had been performed by three Assistant Surgeons, Drs. Billings, Otis, and Woodward, without extra compensation, in addition to their other administrative work.

Since 1865, the history of 300,000 cases had been traced through the records of the Surgeon-General's office, but, from want of proper clerical force, 12,000 to 13,000 applications were now lying unanswered, the number of clerks being reduced from 100 to less than half that number. Over 6,000 quarto pages of publications have thus far been issued from this office. The reports on meteorology, formerly published, are now discontinued, the Signal Office having taken charge of this branch of inquiry. Other reports emanating from the Surgeon-General's office were referred to, as that of Dr. Billings on posts and hospitals, the records of physical examination of recruits, the report of Dr. Ely McClellan on Cholera, etc. The importance of the chemical laboratory connected with this office was dwelt upon.

The volumes of the "Medical and Surgical History of the War" were the records of 270,000 cases. Cheney, in his medical statistics of the war of the Crimea, had 40,000 cases to describe, and 17,000 in the Italian war; but they were not subsequently followed up, as they have been with us. The National Medical Library at Washington now contains 40,500 bound volumes and 41,000 pamphlets. 275,000 cards of all the subjects in the books and journals of this library await the hands of the printer. The catalogue *raisonné*, when published, will make five volumes of 1,000 pages each. The Army Medical Museum contains 19,000 specimens, illustrating military surgery and camp diseases during the war. The hope is, to make this also a general pathological museum. It contains 1,500 skeletons and crania; 1,600 crania alone from all countries, with complete measurements by Dr. Otis. This museum, if added to from private sources, would be especially valuable, particularly if they were specimens which have formed the basis of original researches.

Dr. Woodward then gave an exhibition with the magic lantern, of pathological specimens, microphotographic sections, etc. The thanks of the Congress ere tendered him for his very interesting address.

The Congress met again on Thursday morning, the President in the chair. Drs. Bowditch, Woodward, and Seguin were announced as the delegates to the International Congress at Geneva, to confer on the arrangement of a plan for an international system of medicine and medical observation, in accordance with the action taken on Wednesday.

422 names on the Register were reported by the Secretary-General.

AN APPEAL TO CONGRESS TO SUSTAIN THE SURGEON-GENERAL.

On motion of Dr. Bowditch, the following resolutions were adopted:

Whereas, The work already accomplished by the officers connected with the Bureau of the Surgeon-General of the United States, in the establishment of a medical library, in the preparation of its ample and unique catalogue, and in the formation of an anatomical museum, from which important scientific results have already been obtained, and which have been not only a source of honor to these United States, but of value to foreign lands, and wherever science is cultivated; and

Whereas, This Congress learns with regret that, owing to a lack of a sufficient clerical force and of pecuniary means, not only some of the work already in progress has been suspended, but that other work of equal value cannot be undertaken, although ample materials for the same are now lying unused in the Surgeon-General's office; therefore,

Resolved, That a committee of three be appointed to prepare a memorial to the Congress of the United States, at the earliest day possible, at its next session, urging efficient support to these most important matters.

Resolved, That it is desirable that said memorial should be signed by the president, vice-presidents, and permanent secretary of this body.

SANITARY WORK.

On motion of Dr. J. P. White, of Buffalo, it was ordered that Dr. Bowditch's address on Sanitary Science be transmitted, when printed, to the Presidents of State and Territorial Medical Societies, and Sanitary Boards of the United States and Canada.

Reports from the various sections were then read, accepted, and referred.

On motion of Dr. Richardson, of New Orleans, Dr. Woodward was requested to repeat his lecture of last evening.

THE ADDRESS ON OBSTETRICS.

Prof. Theophilus Parvin, of Indiana, then read the address on Obstetrics. Many improvements in the art may be mentioned, and many advances in the science, notwithstanding Prof. Ramsay, of South Carolina, in the latter part of the last century, declared that obstetrics was so perfect that no improvement was possible. The speaker referred to those prominent at the end of the century—Baudelocque, with his twenty-three presentations and ninety-four positions; Smellie, William Hunter, opposites in views of obstetrics, mechanism, and physiology; Levret, and others. Lloyd in Boston and Shippen in Philadelphia were the earliest American practitioners of distinction. He then referred to Drs. James and Dewees, and their connection with obstetrics in America, the latter giving the first full course of obstetrics in this country. Seventy or eighty years ago the practice of obstetrics was chiefly in the hands of women, and was not lucrative, the compensation being only a dollar—in cities, three dollars—and the accoucheur, or rather accoucheuse, was nurse until the ninth day, and no posthumous honors attended their laborious work.

Bard's compendium was the first work on obstetrics in America. The speaker then alluded to other successful and useful American works, giving sketches of Dewees, and his successors and contemporaries—with criticisms, favorable and unfavorable, of their writings and teachings—as Meigs, Miller, Bedford, Hodge, Tucker, Warrington, Byford, and others. He gave an insight into the numerous treatises and papers on obstetric anatomy, and contended that the improvements in obstetric surgery saved more lives and was the means of relieving or diminishing suffering more than the changes in medicine or surgery proper. The history of the discovery of the anæsthetic effects of

ether and its application to obstetrics was sketched, and the names of numerous authorities who early employed it or wrote papers about it were mentioned.

The use of chloroform and of opium in obstetric practice; the practice of feeding women in labor; the induction of labor in placenta prævia, and in other conditions; the employment of ergot in labor for two most important purposes, etc., etc., were alluded to, with the names especially of Americans who had either first suggested them or improved on the methods of others. He also referred to bimanual turning, cephalic by Wright, or podalic version by Hicks; the treatment of prolapsed cord by Thomas, and others; postural treatment in complicated labor cases; head-last labors, described by Goodell, Parry's correction of faulty positions, Gibson's Cæsarian operations, operations of gastro-elytrotomy, etc., and stated that a full bibliographical appendix would accompany the paper.

The various American works on Diseases of Women were briefly enumerated, criticised, and discussed, such as those of Dewees, Meigs, Bedford, Thomas, and others. In uterine surgery much has been done; a tribute was paid to Sims and Emmet for their treatment of fistula, and to Atlee and Peaslee for their contributions to ovarian surgery. The positional disorders of the uterus were referred to, with an account of the various modifications of the pessary, the use of pneumatic pressure by Campbell, of Georgia, the different modes of treatment for inversion, by J. P. White, Emmet, and others; he discountenanced, as the profession does, resort to abdominal section in such cases. The use of glycerine and hot water was spoken of; the latter was claimed by Emmet to have been originated entirely by himself, to insure permanent contraction of the vessels. American suggestions had also been made in the division of stricture of the uterus in dysmenorrhœa, amputation of the cervix uteri, the application of fluids to the lining membrane of the uterus, the treatment of uterine fibroids, electrolysis and ergot, and their complete ablation being also referred to in this connection, the removal of the uterus itself by Prioleau, of South Carolina, in 1819, etc.

Operations for genito-urinary fistula and for removal of various tumors are two of the greatest triumphs of American obstetric surgery. The names of various Americans were mentioned by the speaker as foremost in these fields. For ovariotomy, McDowell operated thirteen times, with eight recoveries. Spencer Wells lost four of his first thirteen; Baker Brown eight. The English claims to priority were examined and set aside. More than 2,000 women's lives have been saved by this operation. Allusion was made to the early American ovariotomists, to Dr. Drysdale's discovery of the ovarian cell, to the various operations, as enucleation of cysts, obliteration of the vagina, vesico-vaginal operations, as vesico-vaginal lithotomy, etc., of American surgeons.

American works on diseases of children by Dewees, Eberle, Stewart, Condie, Meigs and Pepper, and others, were mentioned, as well as works on special infantile diseases. The formation of obstetrical and gynæcological societies, hospitals, and journals, was rapidly sketched. The speaker alluded also to the presence of two distinguished obstetricians of Great Britain—Barnes and Simpson, and concluded his excellent address with a beautiful peroration.

THE ADDRESS ON MEDICAL JURISPRUDENCE.

Prof. Stanford C. Chaillé, of Louisiana, then read the address on this subject, giving a sketch of the general progress of Medical Jurisprudence for two centuries, alluding particularly to the barbarous views and absurd and superstitious practices of even the last century, such as those associated with the bleeding of wounds, legal decisions affirming paternity from a dream when a husband had been absent four years, the burning alive of those suspected of crime as late as 1780, etc., etc. In 1774 the first law was passed in England to improve the condition of the insane; Pinel first suggested their humane treatment as victims of disease.

The speaker then inquired, with painfully negative replies, what our laws have done to apply medical knowledge to the administration of justice; what efforts to secure the best medical talent in criminal cases; what experience the medical witnesses have had—what information or experience the judges. There are several thousand cases in the United States annually requiring medico-legal inquiry; the coroners, unless by accident, have no experience or information to guide them; any practitioner who calls himself so can be a medico-legal witness.

The first Chair of Medical Jurisprudence in the United States was created in 1813, in the New York College of Physicians and Surgeons. There are now sixty regular colleges in existence. Of forty-six of these, twenty-one do not profess to teach this branch, fourteen have separate chairs—some of them taught by lawyers, and in eleven it is a caudal appendage to other branches.

Allusion was made to a few American contributions to medical jurisprudence, as the corpus luteum of Dalton, and Richardson's employment of high powers in blood-stains. The bibliography of the subject is very full, and will make a valuable addition to Prof. Chaillé's paper. The contributions of Americans to its literature have been but trifling, but they were briefly enumerated by the speaker, as were also the various works and papers on the medical jurisprudence of insanity. In examining the subject of medico-legal progress in institutions, laws, and judicial decisions, he alluded to the fact that in 1874 there were in the United States seventy-seven life insurance companies, insuring $2,220,000,000 on 910,000 policies. The deaf and dumb were formerly considered legal idiots; medico-legal inquiry has now nothing to do with them.

He next spoke of the legislation for habitual drunkards in some of the States, and of the enactments in Maine and New York for the examination of criminals in cases when a plea of insanity was offered, and of the various steps of progress in judicial decisions since the days when protection to the insane was restricted to such as had no more knowledge or control over themselves than mere brutes, and when the Lord Chancellor of England urged the absurdity of calling insanity a disease. He praised the labors of the Medico-legal Society of New York, and its objects, and the good work it was likely to accomplish; and concluded his valuable paper with an exposition of the necessity of competently instructed State experts, reformation in the coronerships, competency of witnesses and judges, and proposed various methods to secure all these good results.

On Friday, President Gross in the chair, the General Secretary reported the number registered as four hundred and thirty.

AN UNNECESSARY AND STUPID RESOLUTION.

Prof. Eve then offered the following resolution at the request of Dr. William B. Atkinson, of Philadelphia:

Resolved, That no papers or addresses read before

this body, and ordered to be published, shall be furnished, either in abstract or otherwise, for publication in any journal prior to the publication of the volume of Transactions.

The reports of Sections were accepted and referred; that on surgery being referred back to that section for an expression of views on Dr. Sayre's treatment of coxalgia.

THE PUBLICATION OF THE TRANSACTIONS.

On motion of Dr. Davis, the following preamble and resolutions were adopted :

WHEREAS, This Congress marks an era in the history of medicine in the United States of America, the addresses delivered presenting a summary of progress in the various departments, which will be of great historical value in all coming time; and

WHEREAS, It is highly probable that these addresses, in connection with the many very valuable papers read and discussed in the Sections, will require for their early and proper publication more money than will be in the hands of the Treasurer for that purpose; therefore,

Resolved, That the Committee of Publication be authorized and instructed, as soon as practicable after the final adjournment of the Congress, to ascertain the probable cost of publishing the full Transactions in a style appropriate for the work, and if the money on hand is found deficient, they shall address a circular letter to each American member of the Congress, asking for such additional sum, not exceeding ten dollars, for each of such members as will supply the deficiency; and that said Committee be authorized to withhold the volume or volumes, when published, from any member who may neglect or refuse to pay the additional sum required.

Resolved, That the Committee on Publication be authorized and requested to exercise a careful and liberal discretion in preparing and revising the proceedings and reported discussions, in the several Sections, for publication in the Transactions of this Congress.

THE TEMPERANCE QUESTION.

Resolutions were received from various temperance organizations, and these were referred, at Dr. Davis's suggestion, to the Section on Medicine.

THE ADDRESS ON MENTAL HYGIENE.

Dr. John P. Gray then read the address on mental hygiene, Vice-President McGuire, of Virginia, in the chair. Beginning with some introductory remarks on mental capacity, he divided his address into the individual, social, and national relations of this form of hygiene. He referred to the bearing of intellectual and physical labor on longevity, the effect of training on manners and habits as exemplified in soldiers, schools, etc.; and to the various social restrictions and regulations as connected with mental hygiene; and to the apparent conflicts between science and religion. Only lately has mental hygiene been particularly demanded in the progress of science as a separate study. The "Rules of Health" of the School of Salernum were quoted, and reference made to the lessons taught by the Exposition, showing that in some countries—as Egypt—the characteristics of many centuries since still pervaded it.

He concluded by reciting the various lessons that could be deduced from the study of mental hygiene.

The address, which was well written and well delivered, was of so general a nature as not to admit of a satisfactory abstract. It differed from all the others in being almost entirely devoid of purely American applications.

THE ADDRESS ON MEDICAL LITERATURE.

Prof. Lunsford P. Yandell, of Kentucky, then read the address on this subject, Vice-President Richardson, of New Orleans, in the chair. His researches had gone back even prior to the last century. He gave a glance at the names of authors, with the titles of books, but did not attempt to catalogue them in the address as delivered. (This paper, when printed, will contain a complete list of American medical works in the order in which they have appeared). He referred to the earlier works that had been published in this country; to Thatcher's various contributions, to the papers and works of writers on yellow fever, small-pox, etc., in the last century, almost all of which were brief, of transient interest, and hardly more extensive than articles in the medical journals of the present day. He alluded to the establishment of medical schools in this country; to Rush and his literary labors, to Currie, Bailey, Mitchell, Miller, Smith, and others of that day; to Caldwell, and his abilities and peculiarities.

The general character of our American medical literature was referred to, and the fact stated that while a text-book in the Italian schools has continued to be such for two hundred years, the most successful of our own scarcely ever reach beyond forty years. The appearance of the first American medical journal in 1797, was alluded to, and the number of those projected since, fixed at about one hundred, of which over fifty have been withdrawn.

The address was cut short by the expiration of the time allotted to it.

PUBLIC DINNER OF THE CONGRESS.

In the evening the public subscription dinner of the Congress was given at St. George's Hall. Nearly two hundred members and guests participated, including the Governor of the State, and all the distinguished foreign and American representatives of the profession attendant on the Congress. Replies to toasts were made by Prof. Joseph Lister, Governor Hartranft, Dr. Woodward, U. S. Army, Gen. Hawley, President U. S. Centennial Commission, Prof. Hjort, of Norway, Profs. J. C. Dalton and Stillé, Mr. William Adams, of London, Dr. Hingston, of Montreal, Profs. Davis, of Chicago, and Chaillé of New Orleans, and Prof. Gross.

On Saturday, President Gross in the chair, those whose names had been reported as on the Register, four hundred and forty-three in all, were confirmed as members of the Congress.

The Secretary-General was extended the privilege of giving Prof. Rudnew, of Russia, facilities of access to the minutes and papers of the Congress, for transmission of an abstract to Russia.

THE CONGRESS NOT PERPETUAL.

Reports were received from the various Sections, but some little discussion took place on that of the Dermatological and Syphilological Section, which was anxious to have a committee appointed in the name of the Congress, to collect data and statistics in regard to syphilis, and report them to the public press; but it was held that no such irresponsible work could be done, when the Congress itself would this day expire.

THE TEMPERANCE QUESTION AGAIN.

In reply to the temperance communications received yesterday, the conclusions adopted on the paper of Dr. E. M. Hunt, of New Jersey, on alcohol, were ordered to be transmitted to these organizations:

1. Alcohol is not shown to be a definite food by any of the usual methods of chemical analysis or physiological investigation.

2. Its use as a medicine is chiefly that of a cardiac stimulant, and often admits of substitution.

3. As a medicine it is not well fitted for self-prescription by the laity, and the medical profession is not accountable for such administration or for the enormous evils arising therefrom.

4. The purity of alcoholic liquors is in general not as well assured as that of articles used for medicine should be. The various mixtures when used as medicine should have definite and known composition, and should not be interchanged promiscuously.

CONGRATULATIONS ON THE SUCCESS OF THE CONGRESS.

Then followed a scene that will long be remembered by those who participated in it, the interchange of personal, national, and international greetings on the remarkable success of the Congress. This was opened by the following resolutions, offered after a speech abounding with complimentary allusion, by Prof. J. P. White, of Buffalo:

Resolved, That the officers and trustees of the University of Pennsylvania are hereby tendered our cordial thanks for the very liberal use of their excellent buildings for the meetings of this International Medical Congress.

Resolved, That the officers and trustees of the Jefferson Medical College are hereby tendered the cordial thanks of this Congress for the use of their lecture-room for the most interesting lecture of Dr. J. J. Woodward, U.S.A.

Resolved, That the Centennial Medical Commission of Philadelphia are hereby tendered the cordial thanks of this Congress for the most excellent manner in which its members have discharged the arduous duties devolved upon them, and by which our pleasure and profit have been so much enhanced.

Resolved, That the president and other officers of the International Medical Congress of 1876 are hereby tendered the cordial thanks of the Congress for the excellent manner in which they have discharged the arduous duties devolved upon them, and by which our pleasure and profit have been so much enhanced.

Resolved, That the cordial thanks of the International Medical Congress are especially due to Drs. Thomson, Wilson, and Strawbridge, and to Messrs. H. C. Lea and J. B. Lippincott, for their generous hospitality.

These were adopted amidst great applause.

A TRIBUTE FROM CANADA.

Dr. Grant, of Ottawa, eloquently addressed the Congress in a very fraternal vein, and reported the following resolutions, adopted yesterday at a meeting of the Canadian delegates to the Congress:

Resolved, That the Canadian members of the International Medical Congress desire to express their sense of the great consideration and urbanity with which they have been treated by the officers and members of the Centennial Medical Commission, and beg by this resolution to tender their warm thanks for the same.

Resolved, That the Canadian members of the International Medical Congress most cordially join with the other members of the Congress, in thanking the members and citizens of Philadelphia for the generous hospitality extended to its members throughout the present session.

THE DELEGATES FROM GREAT BRITAIN.

Prof. Charles J. Hare, of London, then read the following expression of congratulation on the part of these gentlemen:

"The delegates from Great Britain to the International Medical Congress at Philadelphia beg to congratulate the President and the several committees on the complete success of the Congress, on the high value of the various addresses presented to it, and on the forward impulse which it has given to the progress of medicine in the widest sense of that word. They desire at the same time to express in the strongest and warmest terms their sense of and their thanks for the unmeasured kindness and courtesy, and the unbounded hospitality with which they have been received on this Centennial occasion, and to add that they will carry back with them a most grateful recollection of that warm right hand of fellowship which has been so warmly extended to them by their brethren of the United States."

The paper was signed on behalf of the delegates by Dr. Hare, late Professor of Clinical Medicine in University College, London; Mr. R. Brudenell Carter, Hunterian Professor of Surgery in the Royal College of Surgeons of England; and Mr. William Adams, President of the Medical Society of London.

THE COMPLIMENT RETURNED.

On motion of Dr. Bowditch, it was

Resolved, That we, a brotherhood of physicians from the North, South, East, and West of this country, hereby tender to our associates from other lands our most earnest wishes that they may have safe and happy returns to their homes, and we would suggest the hope that they will carry back many pleasant memories of this fraternal meeting now closing, and which has been most appropriately held in this generous and noble city of Philadelphia.

A PORTRAIT OF PROF. GROSS.

Prof. Sayre, of New York, offered the following resolution, which was seconded in a beautiful little speech by Mr. Carter, of London, and cordially adopted by the Congress:

Resolved, That this International Congress request our President, Prof. Gross, to sit for his portrait, and that the Committee of Publication be instructed to have the same engraved and printed in the frontispiece to the volume of our Transactions.

(It is understood that, for sake of correctness, this shall be a photographic likeness, unless otherwise ordered by the Committee.)

The General Secretary presented the preliminary circular of the International Congress of 1877, at Geneva.

THE ADDRESS ON MEDICAL EDUCATION AND MEDICAL INSTITUTIONS.

Prof. Davis, of Chicago, then read the Address on these subjects. He alluded to the early colleges, to the organization of a very few societies during our colonial history, to the qualifications necessary at that time for the physician and surgeon, to the early laws in force affecting them, the modes of examination, etc. In 1752 was founded in Philadelphia the only

general hospital in the country. There were soon after 3.000 practitioners in thirteen States, only two medical colleges, and two organized medical societies. He referred to the early establishment of schools in Philadelphia, the degrees then conferred, with sketches of the relations existing between the schools of that city in the latter part of the century, with the regulations of each for study and graduation. Succeeding schools were also mentioned.

Columbia College, New York, was the first to confer degrees of Doctor of Medicine. The "Doctor's Mob" in New York was referred to; also the interruption by the war of the courses of lectures, the various changes in the faculties, the establishment of the College of Physicians and Surgeons of New York, the organization of schools elsewhere, the apprenticeship system and its effects upon the student, the abolition of the degree of Bachelor of Medicine, etc. The speaker next alluded to the kind of medical works in use at the beginning of the century, and to the limited field of medical science at this time. A detailed account accompanied the report, enumerating all the medical colleges founded since the beginning of the century, with their dates of institution. From the close of the war to the present time, 77 colleges have been founded, not counting a few very transient and ephemeral ones. Sixty-one are now in active operation. In 1875-6, there were in all the States 6,650 students, of whom more than 2,200 received the degree that session, not including those in pharmacy or dentistry, or those conferring degrees founded on exclusive dogmas. Generally medical education is not dependent on legislative aid.

The adaptation of medical schools to the wants of the people and the profession was then discussed, and among other things the conferring of degrees by colleges. No matter how incomplete the course or how defective, the amount of chemical teaching was criticised, as well as the crowding of a whole course into a period of sixteen to eighteen weeks. The faults and shortcomings of the office-student system were considered; the propriety of restricting medical colleges to teaching merely, without making them at the same time licensing boards for examination; the efforts of State medical societies to this end; the conventions of schools for improvement in education; the reform instituted by Harvard and others; and the influence of medical societies, socially and in the character of the papers presented, etc.

THE LAST MINUTES OF THE CONGRESS.

After a few well-expressed remarks as to the inestimable value of the Congress, and of good wishes for all the members now about to separate, the President announced the labors of the Congress completed, and that body then adjourned *sine die*.

Its proceedings will long be memorable, for the Congress was confessedly the most successful medical gathering ever held in this country.

New Method of Removing a Foreign Body from the Ear.—Take a horse's hair about six inches long, and double it so as to make a loop at one end. Introduce this loop as deeply as possible into the auditory canal and twist it gently around. After one or two turns, according to the originator of the plan, the foreign body is drawn out with the loop. The method is ingenious, and at all events causes little pain, and can do no harm.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, June 26, 1876.

Dr. C. K. Briddon, President, in the Chair.

MULTILOCULAR OVARIAN CYST.

Dr. A. Clark presented the contents of an ovarian cyst, removed post-mortem from a maiden lady, aged 64 years, who had died of cancerous disease of the pylorus. The specimen was sent to him by Dr. W. M. Trow, of Haydenville, Mass., the attending physician. There was nothing special in the history of the case. She was never inconvenienced by the pelvic trouble, her symptoms being those of scirrhus of the pylorus, unless it was that she did not suffer the slightest pain during the progress of the disease. The ovarian tumor contained a purulent fluid and a mass of substance composed for the most part of oily matter and an abundance of epithelial scales and flat, rounded cells. In the midst of this fatty mass there was a bundle of hair, measuring two and a half inches in one direction and two inches in another.

Although the tumor had been mislaid for three months, wrapped in a newspaper, it had shown no signs of putrefaction.

Dr. Heitzmann reported that the tumor of the skin removed by Dr. Briddon, and presented at the previous meeting, was of an acute and malignant nature, and was of the variety designated as papillary epithelioma. So far as the microscopical examination showed, the extirpation was complete.

He also reported the tumor of intestine and omentum, presented by Dr. Hinton, to belong to the variety of myxomatous cancer.

MORBUS COXARIUS, AND EARLY OPERATION.

Dr. Sayre presented the hip-joint removed from a child who had been the subject of operation for exsection, and who died of meningitis. Although operated upon when almost in articulo mortis, and with the worst possible hygienic surroundings subsequently, nature made a very successful attempt to enclose the severed end of the bone in a new capsule, and form a new joint cavity.

Dr. Sayre exhibited a second specimen of morbus coxarius, being that portion removed by operation from a child three and a half years old. This was the only one in which, in his experience, the operation had been performed without suppuration being present. With this exception, all the other signs of the third stage were well pronounced. On cutting down upon the joint, the synovial membrane was found to be degenerated, and the ligamentum teres destroyed. The operation had been performed seven weeks, but there had been no signs of suppuration, and the patient was doing well.

Dr. Sayre lastly exhibited an encysted tumor of the outer side of the leg, which had been the occasion of a rupture of a vein and extensive ecchymosis.

SARCOMA OF THE SKIN IN SOME RESPECTS RESEMBLING KELOID.

Dr. Satterthwaite presented the notes of the following case:

Louis Prewitz, 43, Germany, was admitted into the Presbyterian Hospital, May, 17, 1876, for a growth upon the left side of his neck and shoulder, and he gave in substance the following history. Fifteen years previously, a wart appeared upon the neck, and

as it gave him some annoyance from bleeding freely when his clothes pressed upon it, he had it tied off. This was done in 1861. The tumor, however, grew again, but was finally rubbed off by his clothes; again, a third time, it grew, and got to be as large as a small nut; it was again tied off, and again, the fourth time, grew, when it was cut off by a surgeon. The wound healed entirely, but soon there appeared under the scar a "bluish boil," as the patient expressed it. At this point the tumor appeared again for the fifth time. A surgeon at the German Dispensary removed it, in 1875. Since that time several growths sprang up, and the skin became affected, which was not the case before, as the disease was confined to a single pendulous nodule. The patient said that his general health had not been affected by the growths, except from the loss of blood, which had been considerable at times when the clothes irritated them.

When admitted into the hospital, the following notes were recorded in the case-book: "The tumor is a fungous-looking mass about the size of a man's fist, somewhat lobular and pedunculated. . . . It is situated over the upper portion of the left scapula. The tumor is not adherent to the muscular layer. Running out from the tumor in three directions are elevated ridges about the size of a man's finger, resembling cicatrices. The longest, four inches in length, runs across the neck to the right. On May 25th, a very large portion of the tumor was removed, including all the pedunculated growths. The patient has done remarkably well since the operation, and the wound is in a great measure closed.

Microscopical examinations, May 24, 1876.—The portion examined was one of the pedunculated nodules; it was soft, and of a pale pinkish consistence. Externally it exhibited the normal constituents of the skin, but in a hypertrophied condition.

"The horny layer was intact, and measured from $\frac{1}{600}$ to $\frac{1}{300}$ of an inch in thickness. The rete Malpighii, from the bottom of the horny layer to the summit of the papillæ, measured from $\frac{1}{100}$ to $\frac{1}{60}$ of an inch.

"The length of the papillæ varied between $\frac{1}{50}$ and $\frac{1}{10}$ of an inch. The surface of the skin was nowhere broken. The tissue occupying the position of the corium was that mainly of which the tumor was composed. It consisted chiefly of fusiform elements, closely packed together, and formed into bundles in many places; these elements were large, flattened, and fusiform, containing a flattened rounded corpuscle. These elements extended upwards into the papillæ; many of them could be isolated, and then they were seen to have a length of from $\frac{1}{500}$ to $\frac{1}{1000}$ of an inch. The central body had a length of between $\frac{1}{300}$ and $\frac{1}{250}$ inch. Vessels were numerous, their walls being composed of the same tissue. From the histological character of the growth, it was said to be a fibro-plastic tumor, or spindle-celled sarcoma of the skin. The special interest which attached to the specimen was, that by some it had been regarded as a keloid undergoing degeneration. The hard ridges had the appearance of keloid to the eye, but the microscope showed that the tissue composing them was made up entirely of the fusiform elements, and not the wavy bundles of fibrillated connective that belong to either class of keloid, the true or false."

INFANTILE DIARRHŒA is the subject of discussion in the English journals. We are pleased to notice the respectful consideration with which the views of our fellow-townsman, Dr. J. Lewis Smith, are received regarding the pathology of the affection.

Reviews and Notices of Books.

REPORTS AND PAPERS RELATING TO THE CONSTRUCTION AND ORGANIZATION OF JOHNS HOPKINS HOSPITAL. No. I.

THIS brief report of Dr. J. S. Billings, U.S.A., is called forth by the request made to him by the Trustees to present his views on the various plans and drawings of the architect and building committee for the Johns Hopkins Hospital. It is marked by the sanitary skill and prevailing good sense of the author. Although brief, it succinctly presents the points at issue in the erection and general administration of the institution.

The ideas of charity education and science are clearly brought out as dwelling in the mind of the donor. It is shown how these can be constantly exercised and combined. The clinical education of the student does not involve the necessity of bringing a delicate patient "before unsympathetic, noisy students, to be lectured over as if he were a curious sort of beetle." The charity itself conveys the idea that it is to benefit not only those treated within its walls, "but the sick and afflicted of all countries and of all future time." He rightly insists that in a higher method, such as may be adopted here, it is quite possible to educate the student clinically, and yet not annoy the patient.

It is claimed that much of the value to students is to be in rooms for apparatus, observation and experiment, and so in opportunities for scientific investigation in the line of physics. It is an important problem how to harmonize the greatest good to the patient, the physician, and the public; but it can and will be done.

Nothing can be plainer than the design of the founder to have the Hospital "form a part" of the medical school of the University.

The training of men as special investigators, as sanitarians in relation to State and municipal interests, as alienists, and as to child diseases, are particularly referred to. Thorough courses are insisted upon not only for the future, but as preliminary, so that the very men chosen for special departments shall beforehand prove their ability. He purposes that there shall be as much difference between these and the average medical student as between an architect and a bricklayer. It is true that the real hospital "consists of the brains to be put into it." It is plain that the relations of the hospital, its structure and its administration, have intelligent and well-drawn outlines in the mind of the author.

PREVENTION OF YELLOW FEVER BY WHISKEY.—Dr. A. N. Bell, of Brooklyn, writes: "In the RECORD of 19th inst., the report of my remarks at the recent meeting of the American Medical Association on the 'Prevention of Malarial Fevers,' is erroneous. I never said that at Vera Cruz, or anywhere else, I advised the use of whiskey as a prophylactic of yellow fever, or of any other disease. On the contrary, I probably stated that a popular error prevailed at Vera Cruz at the time referred to, 1847–'8, that whiskey was a prophylactic of yellow fever, and that its use was encouraged by those who were fond of it, with fatal effect."

Correspondence.

THE CAUSE OF CHOREA.

To the Editor of The Medical Record.

There is an old and familiar story of an individual who covered the eyes of his horse with green glasses, and placed before him a basket of shavings, with the idea that the unsuspecting animal would believe them to be grass. I think at some time or other we are all apt to look through glass of one color, when the object is likely to appear more attractive. As a case in point, I would refer to a paper which recently appeared in the Medical Record, and in which the author considers a well-known form of nervous disease to be due to certain errors of refraction. The same gentleman made the unqualified statement, at a meeting of the Academy of Medicine, on the fifteenth of June last, that chorea, as well as all functional nervous diseases, were in his opinion due to this cause in the great majority of cases. If this is the fact, it is about time for neurologists to buy green spectacles, or else renounce their specialty. But before doing so, it might be well to test the truth of the theory Dr. Stevens announces so confidently. Surely, the etiology of chorea is well understood, although its pathology is not so clearly settled. If we exclude bad habits, bad air, bad food, fright, improper mental hygiene and example, and consider the eyes at fault in every choreic patient—we at the same time must forget that proper diet, sufficient pure air, mental rest—medicines (which are almost specifics) and other management will cure our patients without the use of glasses. That these cases very often recover spontaneously—that persons who are even *blind* may suffer from chorea, as well as other functional neuroses—should also be taken into consideration.

To test the question, I have examined a number of individuals, half of whom are perfectly healthy, and the other half are patients under my care—some of them have chorea. I have been unable to find any preponderance of astigmatism, myopia, or hypermetropia in either class. That the muscles of accommodation as well as others of the body may become the seat of spasm *after the disease is established*, I have no doubt; but as a cause, I do not agree with Dr. Stevens. All of the author's cases were examined after the appearance of the chorea. If he could have examined them before, no one would have been more ready to be convinced than myself.

Allan McL. Hamilton.

123 East 30th St., Sept. 5th.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from Sept. 3d to Sept. 9th, 1876.

Alden, C. H., Surgeon. Assigned to duty as Post Surgeon, at Fort Townsend, W. T. S, O. 112, Dept. of the Columbia, August 25, 1876.

Byrne, C. C., Surgeon. Assigned to temporary duty with troops encamped on site of new post on Yellowstone River, M. T. S. O. 106, Dept. of Dakota, August 30, 1876.

Sternberg, G, M., Surgeon. Assigned to duty as Post Surgeon at Fort Walla Walla, W. T. S. O. 112, C. S., Dept. of the Columbia.

Billings, J. S., Asst. Surgeon. Granted leave of absence for three months, with permission to go beyond sea. S. O. 182, A. G. O., Sept. 2, 1876.

Buchanan, W. F., Asst. Surgeon. Assigned to temporary duty at these Headquarters pending his summons as a witness before a General Court Martial. S. O. 161, Dept. of Texas, August 29, 1876.

Wolverton, W, D., Asst. Surgeon. Assigned to duty as Post Surgeon at Standing Rock Agency, D. T. S. O. 106, Dept. of Dakota, August 31, 1876.

Carvallo, C., Asst. Surgeon. Assigned to duty at Fort Union. N. M. S. O. 184, Dept. of the Missouri, September 4, 1876.

Maus, L. M., Asst. Surgeon. Granted leave of absence for one month with permission to apply for an extension of one month. S. O. 132, Dept. of the South, September 2, 1876.

Corbusier, W. H., Asst. Surgeon. Assigned to duty at Fort Macon, N. C. S. O. 133, Dept. of the South, September 5, 1876.

Ainsworth, F. C., Asst. Surgeon. His resignation accepted by the President to take effect November 10, 1876. S. O. 182, A. G. O., September 2, 1876.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending September 9, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Sept. 2.....	0	18	12	0	1	21	0
Sept. 9.....	2	19	8	3	2	22	1

Japan and the Medical Congress.—The Japanese government appointed three physicians as delegates to the congress. Nagayo Sensai and Miyaki-Kūdzu were sent by the Minister of the Interior, and Ishiguro Tadanori is a member of the medical staff of the Minister of War.

The Wiener Medicin Doctoren Collegium appointed Dr. Charles Heitzmann, of New York (Vienna, 1859). Dr. Lander Brunton was a delegate from the Medical Society of London, and Dr. Charles John Hare, Dr. Robert Barnes, and Mr. R. Brudenell Carter, from the Royal Medical and Chirurgical Society of London, Dr. Hare representing also the Pathological Society.

The Preservation of Ice at the Bedside.—Mr. Samson Gamgee employs the following simple plan for the preservation of ice in the sick-room. A piece of flannel about nine inches square is secured by a cord about the mouth of an ordinary tumbler, so as to leave a cup-shaped depression of flannel within the tumbler to about half its depth. Small pieces of ice placed in this flannel cup, and loosely covered with another piece of flannel, may be preserved for hours.

Cheap flannel with comparatively open meshes is preferable, as it allows the water to drain through, and the ice is thus kept quite dry. If good flannel with close texture be employed, a small hole should be made in it to allow of drainage. Mr. Gamgee found by experiment that in a room of 60 F., two ounces of ice broken in pieces suitable for sucking and placed loosely in a tumbler, were entirely melted in two hours and fifty-five minutes. The same quantity of ice in a cup, made as above described of good Welsh flannel, took six hours and a half to melt, while the same quantity placed in a cup, made of cheap open flannel, lasted ten hours and ten minutes.—*The Lancet*, June 10th.

The Medical Profession at Saratoga.—We have received a letter denying in toto the charges made by a resident physician of Saratoga against the metropolitan practitioners who visit that city during the fashionable season. The letter in question answers the allegations quite satisfactorily, but is too lengthy for publication. From what we know of the gentlemen against whom these charges have been made, and from what we have since learned, we believe that the writer of the article in question has been misinformed respecting the facts involved. We shall refer to the matter editorially in a future number.

The Medical Associations in New York.—During the past week the profession of this city have been busy in entertaining the foreign guests who were in attendance upon the Ophthalmological and Otological Congresses, and the American Gynæcological Association. The meetings of these bodies were well attended, and many interesting subjects bearing upon the respective specialties were discussed. The Ophthalmological and Otological Congresses were of an international character, and were well represented by delegations from the European centres. The establishment of these associations is an evidence of the progress of specialism, and of ardor in the pursuit of these departments of science, which is in keeping with the spirit of the age. The Gynæcological Association, although a younger brother, has proved itself by no means a feeble one, and is destined to be a success from the start. The members of these associations who were in attendance were highly pleased, not only with the scientific but with the social part of the entertainment, heartily responding to the elegant and refined hospitality which was tendered them. The members of the Ophthalmological and Otological Congresses were handsomely entertained by the receptions of Dr. Agnew and Dr. Knapp, at the respective residences of these gentlemen; while the grand dinner fitly closed the festivities. The Gynæcological was not behindhand in enjoyment of the same kind of entertainments; besides the receptions, there having been an elegant dinner given by the New York and Brooklyn residents. The profession here know how to be hospitable, and their guests are always ready to appreciate the efforts made to entertain them. Of the strictly scientific character of the meetings we shall give an opportunity to our readers for judging when our reports are published.

Yellow Fever at Savannah.—Yellow fever is declared to be epidemic in Savannah, and is of an unusually malignant type, the death rate being thirty-one per cent.

Health of Watering-places.—The *Lancet* expresses considerable anxiety in regard to the present unsanitary condition of several of the leading health resorts of England.

Traumatic Tetanus in the Horse.—Mr. R. W. Finlay, V.S., of this city, sends us a report of two cases of traumatic tetanus in the horse cured by the following:

℞ Potass bromid..... ʒ iv.
Chloral hydrat..... ʒ ij.
Aqua..... ʒ viij.
M. Fiat sol.
S. To be taken in one dose and repeated three times daily.

The Medical Society of Yokohama, Japan, is the title of a new medical organization in Yokohama, Japan. The officers are: President, Dr. D. B. Simmons; Vice-President, Dr. Edwin Wheeler; Secretary, Dr. Stuart Eldridge.

The Croton Water.—The disagreeable taste and smell of the Croton water supplied to the city has now entirely disappeared.

How to Make Leeches Bite.—The *Le Progrès Médical* advises, in order to make a leech bite readily, to place it in a glass containing cold water, to wash the skin of the patient with warm water, and apply the glass at once.

A New University.—The Russian Government has issued a loan of $200,000, secured on the revenues of the State, for the creation of a University of Law and of Medicine at Tomsk, Siberia. Siberia has a population of six millions, and only one doctor for every 50,000 inhabitants. Russia has at present only seven universities, viz.: St. Petersburg, Moscow, Kiew, Kazan, Kharkow, Odessa, and Varsovia. That at Tomsk will be the eighth, and perhaps there will soon be another at Vlna.

Veterinary Supervision.—The Police Commissioner of Paris has appointed a staff of veterinary surgeons to watch over the sanitary state of horses used for trade purposes.

The British Army Medical Service.—The British Army surgeons in India are very much dissatisfied with the provision of the recent army warrant.

Suicides in the German Army are now on the decrease. The number of suicides is relatively highest in the Austrian Army.

Stevens' Triennial Prize—1879.—This prize, established by Alexander H. Stevens, M.D., amounts to two hundred dollars. The questions for 1879 are as follows:

I. "Bacteria and kindred organisms in their relation to disease."

II. "Human excreta as a cause of disease; the diseases produced therefrom and their prevention by hygienic means."

The competing essays on either of the above subjects are expected to give an account of our present knowledge, and also the results of personal investigation.

The essays must be sent in to the President of the College of Physicians and Surgeons, New York, on or before the first day of January, 1879. Each essay must be designated by a device or motto, and must be accompanied by a sealed envelope, bearing the same device or motto, and containing the name and address of the author. The envelope belonging to the successful essay will be opened, and the name of the author announced, at the Annual Commencement of the College, in March, 1879.

This prize is open for universal competition.

J. C. Dalton, M.D.,
Secretary of the Committee.

The Profession and the Newspapers.—The attention of the Council of the Medical Society of the County of Kings (N. Y.) has been called to the question of ethics involved in the publication by members of the Society of letters, etc., in the newspapers. The Council holds the opinion that the present sentiment of the profession does not favor medical communications of a personal character.

The accompanying notice was, in 1872, sent to all members, and it is again published in the Transactions as a reminder to delinquents:

"The Council desires to call the attention of members to the fact that the names of certain members of the Society have recently appeared in the public prints in connection with medical subjects. The Council having charge of the ethical relations of members hereby gives notice that such cases will be investigated."

The Council also calls to mind the fact that this Society has a standing Committee on Public Instruction, to which it would be fitting to refer all matters important to be made known to the public. If any member prefers not to act with that Committee, or if he thinks he has an especially urgent message to deliver to the laity, it would be in accordance with the spirit of our ethics to sink his personality for the time being. This may readily be done by the employment of an initial or *nom de plume*, instead of the full name, in or after articles intended for the medical edification of the secular press.

Death from Boxing the Ears.—Lancashire seems determined to obtain an unenviable notoriety in the peculiarity of the methods used for inflicting injuries. Some time since, the favorite weapon was the heavy boot shod with iron. The *Liverpool Post* now records an investigation made by the borough coroner as to the death of a scholar, aged 13, at Christ Church School, in Christian Street. The boy having been disobedient, and refusing to hold out his hand to be caned, was boxed on the ears by the schoolmaster. This occurred three or four months ago. A few weeks since, the lad, who had previously suffered from deafness, complained of a pain in his ears; and the medical evidence showed that death resulted from a long standing auricular disease. The doctor added that, whilst a blow might have irritated an already sensitive part, it would not have accelerated the boy's decease. The history is by no means clear, nor is the doctor's statement, as here recorded. The jury, in giving their verdict of "death from natural causes," added that, in their opinion, the punishment was administered injudiciously. With this opinion we quite agree. Injuries to the head are always alarming, but when the injury is localized so as to affect one of the special senses situated there, it is still more so. Injuries to the eye and ear are particularly to be avoided. These being organs of the utmost importance, consisting of the most fragile tissues, and partly exposed, we would impress upon all the danger of inflicting the slightest corporal chastisement in those regions. A comparatively slight blow on the auricular region, if it happens to compress the column of air in the meatus exactly, may cause a rupture of the membrana tympani. That this is not of unfrequent occurrence is well known to aurists. We are, however, of opinion, that, considering the pressure which the healthy tympanic membrane has been found to resist without rupturing, the membrane which gives way to such a blow has probably not been in a healthy condition at the time of the injury. The suddenness of the blow is also, we believe, an important element. The history given of most of the cases is, that the blow was unexpected, and this agrees with the histories of the ruptures arising from explosions. Artillerymen, for example, who are subjected to explosions of the loudest kind, avert any injury to the drum, if they expect the explosion and prepare for it. Prize-fighters suffer from ear-affections occasioned during fighting, but rupture of the drum is not so common as inflammation of the auricle and meatus, and tumors of the auricle. In such the blows are without doubt much harder, but either from their watching for, and accordingly preparing themselves for the receipt of the blow, or from the form of the hand, which, at the time when it inflicts such blows, allowing the compressed air to escape better, injuries to the auricle more often occur than to the membrane. Besides the injuries to the auricle, meatus, and membrane, injuries to the vestibule and the fenestra ovalis may occur from blows on the ear, setting up pathological conditions which may be quite irremediable. Cases are recorded in which death has occurred, but they are rare. We would impress upon all those whose duties may compel them to inflict corporal chastisement, the necessity of limiting their application to the regions which have ever in England been considered the seats of punishment, and avoiding those in which the pain suffered at the time is not more severe, while the injury inflicted may be far beyond what was contemplated by the giver of the punishment.—*British Medical Journal.*

Gastrotomy.—Dr. Wolzendorff, of Greifswald, has unearthed from the German medical literature the histories of two operations of gastrotomy, performed by German surgeons in the 17th century. The first was performed by Florian Matthis, of Brandenburg, in 1602, and a knife which had been in the stomach fifty-one days was extracted. The knife had an iron blade and a horn handle, and was nine thumbs' breadth (seven inches) in length. Contrary to the expectations of the doctors, the patient recovered. The second operation was performed by Daniel Schwab, the Königsberg lithotomist, in 1635, and a knife which had been forty-three days in the stomach was extracted. The patient recovered.

Treatment of deep Atheromatous Cysts in the Neck.—In those cases in which the extirpation of the cysts is difficult, or is likely to leave an ugly scar, Esmarch recommends that the sac be punctured and washed out with a one per cent. solution of carbolic acid, until the fluid escapes clear, and then Lugol's solution injected and left in for a few minutes. If the cyst has not decreased much in size in six to eight weeks, the operation must be repeated. In six months nothing should remain of the cyst but a small tubercle.

Premature Mental Decay.—Dr. Routh, in his recent work, gives an interesting interview with Dr. Golding Bird six weeks before the death of that gentleman, in which he spoke of his full waiting-room and large professional income as being no matter for congratulation, seeing that he (Dr. B.) felt himself a wreck at a little over forty. "My parting words of advice to you," said Dr. B., "are, never mind at what loss, take your six weeks' holiday."

The British Medical Association.—The meeting of the British Medical Association was held in Sheffield, England, according to announcement, and was a reasonable success. The addresses on medicine and surgery were well received, but the number of papers crowded into the time allotted for the sessions almost precluded the possibility of any discussion upon them.

Original Lectures.

LECTURES ON FEVERS.

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(Phonographically reported for THE MEDICAL RECORD.)

LECTURE I.

GENTLEMEN—To-day we will commence the study of those diseases which depend upon morbid conditions of the blood, produced by morbific agents developed exterior to the body of the affected. Such morbific agents may give rise, either directly or indirectly, to morbid processes; either by the changes which they produce in the blood, or by their action on the different organs and tissues of the body to which they are conveyed by the blood-vessels and lymphatics.

The class of morbific agents which will now especially engage our attention may be included under the general head of *viruses*.

By the term virus I mean a morbific substance which is developed either from animal or vegetable tissues in the process of decomposition, or from the excretions of diseased living beings. Many viruses are volatile, and may be conveyed either by air, by fluids, or by solids, and when so conveyed they become the means by which diseases known as contagious or infectious are transmitted. Some viruses are palpable poisons, and may be transmitted from the diseased to the healthy by inoculation.

When the virus which gives rise to a disease has its origin only in a living being, from whom it is excreted in an active state capable of conveyance from one person to another, then the disease which it produces is called contagious, and the virus is called a *contagion*.

If the morbific agent which has the power of developing disease has originated from decomposing organic matter, and has been diffused through the air or water, so that infection may have resulted without contact with one already diseased, the disease is called *miasmatic*, and the virus is called a *miasm*. For instance, intermittent fever is a miasmatic disease, while small-pox and measles are contagious diseases.

With our present knowledge of the nature and origin of viruses, we can make no other classification, except as it is based on their differences of action. We speak of typhus, typhoid, and malarial poisons, but these different poisons have as yet no known physical or chemical properties by which we are able to distinguish one from another. We can only recognize their presence by the peculiar morbid phenomena which each has the power of developing in the animal economy.

The different diseases which are developed by the morbid processes excited by these different viruses are at the present time classed under the head of *infectious diseases*, and the influence of these viruses upon the body is called *infection*. It is also important for you to remember that all of those diseases which are included under the general head of infectious diseases have their own specific morbid product, which will produce these, and only these diseases; and although these different diseases may have very many symptoms in common, and may very closely resemble each other in the phenomena which attend their development, yet the specific character of the morbific agent which has produced them stamps them as distinct diseases. There is reason to believe that not one of this class is of spontaneous origin, but that each depends on its own specific poison. As to the exact nature of such a poison, and its element of power in the production of disease, we have no positive knowledge; at the present time, in regard to it there are two prominent theories.

The *first* is based upon chemical processes; the *second* upon the multiplication of living organisms.

The *chemical theory* maintains that after the infectious element has been received into the blood it acts as a ferment, and gives rise to certain morbid processes upon the principle of catalysis.

The *theory of organisms*, or the germ theory as it is called, maintains that the infectious poisons are living organisms, which, being received into the blood, reproduce themselves indefinitely, and by their reproduction morbid processes are excited which are characteristic of certain types of disease. This is a very seductive theory, and at the present time is quite extensively adopted by medical theorists, as it so readily explains very many remarkable facts connected with the development and reproduction of the class of diseases which are soon to engage our attention. It is readily understood, and there are so many animal poisons which appear to act in this manner, that to one whose opinions are not based upon clinical experience and actual contact with disease, the arguments in its favor are conclusive.

According to this theory all the different forms of disease included under the head of contagious or infectious may be reduced to, or embraced in, two classes.

First, infectious diseases which depend for their development upon a living animal organism. *Second*, those which depend for their production upon a living vegetable organism. Unfortunately for this theory, the special organism of any one of the infectious diseases has never been so plainly described by any one competent observer that all others in the same field of study could with certainty recognize it. The bacterian theory, which recently has so occupied the attention of medical men, especially in Germany, is rapidly being disproved, and consequently as rapidly being abandoned. In this country it can scarcely be held to have ever gained a foothold. It seems to me that one who has watched bacterian development must arrive at the conclusion that bacteria found in connection with the development of disease are the product and not the cause of the diseased process; certain it is that the theory that there exists distinct typhoid, typhus and diphtheritic living germs which are the propagating element of these different diseases, still lacks that proof which will lead the practical physician to adopt it. The question then comes back to us, what is the real nature of those morbific substances which, when received into the human organism, have the power of manifesting phenomena which characterize that class of diseases which we term infectious or contagious. Every day's experience must convince the careful observer that each one of this class of diseases has a distinct producing cause—that the poison of typhus will not produce typhoid fever, neither will the poison of measles develop scarlatina. Although the phenomena which attend the development of these differing diseases may have many points of resemblance, yet each has a distinct origin, that is, has its own specific infection, which specific morbific substance, whenever introduced into the animal economy, either through the skin, respiratory organs or digestive surfaces, interferes in a greater or

less degree with the functions of organic life. This interference is caused either by changes which it produces in the constituents of the blood, or in the solid organs and tissues to which it is conveyed by the blood-vessels and lymphatics.

After reviewing these differing theories and giving careful attention to the facts presented in their support, we arrive at this conclusion—that the exact nature of these morbific agents is unknown. We know that they exist from the diseased action which they produce, and from the manner in which these diseases are propagated we decide that their poisons are distinct from all other poisons, and that each is specific and can reproduce itself to an unlimited extent. The germ theory but explains the phenomena of development. The chemical theory has decided claims on our acceptance, but until our explorations shall have been carried so far as to determine beyond question what is the exact nature of several of these poisons, we shall be compelled to call them unknown morbific agents, governed by certain fixed laws of development and propagation; at the present time investigation in this direction has scarcely begun.

As we pass from the general causation of this group of diseases to their classification, we find ourselves still in doubt. The symptomatic basis of classification of the earlier writers gave place to the more scientific and comprehensive anatomical basis of classification. This for a long period has been almost universally adopted, yet now is giving place to the recent and more definite etiological classification of the present day.

When this group of diseases are classified upon an etiological basis, very naturally they divide themselves into three classes.

First.—A class in which the morbific agent cannot be developed exterior to a living being, but, when developed within the system of one individual, can be transferred to another through the atmosphere. Such is the case in measles, small-pox and typhus fever.

Second.—We have another class called miasmatic or malarial diseases, in which the morbific agent is developed exterior to a physical organization, and cannot be conveyed from one individual to another.

Third.—There is a class in which the morbific agent is developed within, and reproduced exterior to a physical organization. In this class, the poison is developed within the body, but in order to the reproduction it must be deposited in decomposing organic matter exterior to the body; it is then rapidly reproduced, and when received into a healthy organism gives rise to diseased processes. It cannot be directly conveyed from the sick to the healthy, but only through the excrements of the sick, or through decomposing organic matter exterior to the body, with which such excrements must have been in contact. There may be all the elements necessary to its reproduction, such as decomposing animal and vegetable matter, but the disease will not be developed unless there has been added to this decomposing mass, the specific poison of the disease.

The diseases thus developed have been called *miasmatic-contagious*, of which typhoid fever is the best example.

All the different forms of acute contagious miasmatic or miasmatic contagious disease may be either *endemic* or *epidemic*.

They are *epidemic* when they attack a large number of persons at the same time and in the same manner.

They are *endemic* when they are often repeated in the same locality. If they attack individuals without regard to time and place, they are called sporadic.

With this brief introduction, we will enter upon the study of that class of diseases which during the present century have been included under the general head of *fevers*.

Adopting an etiological basis of classification, I shall divide fevers into three classes.

1*st. Contagious Fevers.*—I shall include under this head all of those fevers which depend for their development on a specific morbific agent, which agent must originate in an individual suffering from a like specific disease.

2*d. Miasmatic* or *Malarial Fevers.*—I shall include under this heading all of those fevers which depend for their development on a morbific agent developed exterior to the body, and not connected with any previously diseased physical organization.

3*d. Miasmatic-Contagious Fevers.*—I shall include under this head those fevers which depend upon a morbific agent developed exterior to the body in animal and vegetable decompositions, to which has been added the specific poison of the fever which has had its origin in a diseased physical organization.

The following is the classification which I shall adopt:

1*st Class.*—Contagious Fevers. Typhus Fever, Relapsing Fever, Puerperal Fever, Scarlet Fever, Small-pox, Measles.

2*d Class.*—Malarial or Miasmatic Fevers. Simple Intermittent Fever, simple Remittent Fever, Pernicious Fever.

3*d Class.*—Miasmatic Contagious Fevers. Typhoid Fever, Yellow Fever, Typho-malarial Fever.

The third class of fevers form a connecting link between the first and second class.

In their pathology and clinical histories they have many things in common with each of the other classes, as also in their origin, nature of poison, etc. On this account, and from the fact that during the course of every fever some of the phenomena of typhoid fever are presented, I shall first describe those fevers included in the third class, and shall commence with *typhoid fever*. This is the most universally prevalent of all the fevers. So far as we know, there is no place where it may not be developed and spread. It more frequently prevails in the temperate zone than in the torrid or frigid, but it is possible for it to be developed in all latitudes and in all countries.

This disease, which is essentially the same in all countries, is designated by different names. American writers describe it under the name of typhoid fever. The French call it the typhoid affection, or dothinenteria. English writers describe the same form of disease under the head of enteric fever. The Germans call it abdominal typhus, or gastric fever. I prefer the name typhoid fever, and will commence its history by describing its anatomical lesions.

Morbid Anatomy.—As soon as the disease is fully established, a change in the blood occurs. It becomes darker in color, coagulating imperfectly, the serum being imperfectly separated from the solid constituents, and is of an unnaturally yellow color. The question arises—did these changes take place in the blood prior to the occurrence of the fever, between the exposure and the period of attack. It is certain, that as soon as the characteristic symptoms of the disease are present, the diminution in the fibrin of the blood is in exact proportion to the severity of the fever, and the number of white globules is increased in a similar ratio.

As a consequence of these blood changes, or in connection with them, a series of changes takes place in those organs and tissues of the body in which the processes of waste and repair are most rapidly going on.

These changes are of the nature of parenchymatous degeneration—the essential constituents of the affected organs and tissues being involved.

Similar parenchymatous changes are met with not only in typhoid fever, but to a greater or less extent are characteristic of other fevers and acute infectious diseases.

Spleen.—The organ in which parenchymatous degeneration occurs earliest and most extensively is the spleen.

We find this organ undergoing three distinct changes.

First.—It is increased in size, sometimes enormously. The enlargement commencing soon after the beginning of the disease, and goes on rapidly until the third week, after which it ceases, and after a few days begins to diminish in size. If recovery takes place, by the time it is reached the spleen will have returned to its normal size.

The splenic enlargement is apparently due to congestion and to an increase of normal elements.

Second.—As soon as the spleen reaches its maximum size, its consistency becomes soft; this softening is sometimes so marked that, if a post-mortem be made at the end of the third week, the spleen will present the appearance of a dark, jelly-like mass, which is easily broken down.

Third.—The organ becomes almost black in color, owing to the intense congestion which attends its enlargement, and to the deposit of a brown pigment in its substance.

These changes in the spleen take place in a greater or less degree, in ninety-eight cases out of every hundred.

At the post-mortem of those who have died of typhoid fever, infarctions are sometimes found, although there is nothing peculiar about them. In rare instances, rupture of the spleen occurs without infarctions.

Liver.—Changes in the liver are by no means as common as those in the spleen. The liver may be found presenting its normal appearance, or it may be soft and flabby. When soft and flabby, a microscopic examination shows the liver cells more or less granular and fatty, the nuclei of the cells can no longer be seen, and the degeneration may become so extensive that the outline of the hepatic cells are lost, and nothing but a mass of granules can be seen.

Occasionally there will be found in the liver of those who have died of typhoid fever, small grayish nodules situated along the course of the small veins; these nodules consist of lymphoid cells.

The lining membrane of the gall-bladder sometimes presents evidences of catarrhal or diphtheritic inflammation, when there has been no evidences of its existence during life; cases are recorded where it has been found ulcerated.

Kidneys.—Degenerative changes in the kidneys are of not infrequent occurrence in the course of typhoid fever; they vary in extent with the duration and severity of the fever. When present, they are more marked in the cortical than in the medullary portion of the organ. In some cases they are confined to the epithelial elements, while in other cases degeneration of all the anatomical elements of the organs can be found. Such extensive changes are less liable to occur in typhoid than in typhus fever. Small gray nodules similar to those referred to as occurring in the liver are sometimes found.

If the epithelial degeneration of the cortical substance is extensive, the cells finally break down into a granular detritus, and the cut surface assumes a yellow color and is softer than normal. Infarctions are sometimes met with in the kidneys of those dying of typhoid fever.

Heart.—The parenchymatous changes which take place in the heart are more marked than those in any other organ, for its anatomical elements undergo waste and repair more actively than those of any other organ; and if faulty nutrition is an important element in these degenerative changes, this organ must become very markedly involved.

In a large proportion of cases it becomes soft and flabby, and is of a grayish or brown color. Sometimes it is so much changed that its tissues are easily broken down by moderate pressure; it loses its normal outline, and when removed from the body the walls of its cavities readily fall together. When its muscular tissue is examined microscopically, in many instances it will be found that granular changes, affecting the ultimate muscular fibres, have occurred; this granular muscular degeneration may involve a large portion of the organ, or it may be confined to a few muscular fibres. It may be a general or a localized parenchymatous degeneration. Occasionally the muscular fibres are infiltrated with brown pigment.

If, as is sometimes the case, the heart is firm and friable and its cut surface glistens, the muscular fibres will be found to have undergone a change which closely resembles amyloid degeneration; the muscular fibres will be filled with a material which presents the same shining appearance as the amyloid substance, but on applying the iodine test the same reaction does not take place. It is a form of degeneration which occurs in typhoid fever and is not confined to the muscular tissue of the heart, but is found to a greater or less extent in the voluntary muscles of the body.

Thrombi are sometimes found in the heart, and vegetations adhering to the valves and chordæ tendineæ. These may give rise to infarctions in the different organs of the body. The existence of the degenerative changes in the heart, to which I have referred, may be recognized during the life of the patient, for the heart sounds become feeble according to the extent of the degeneration. In some cases the first sound of the heart will be absent, and it has been claimed that when this phenomenon is present, the use of stimulants in large quantities is indicated.

Lungs.—The lungs undergo changes which have received the name of splenization. This is a form of pulmonary congestion which has received its name from the close resemblance which the affected portion of lung tissue bears to the spleen.

The affected lung tissue is of a darker color than normal, and scattered through its substance will be seen little red or yellowish white points; these little points are scanty blood extravasations.

Lung tissue in a condition of splenization is of a dark reddish blue, brown, or black color; its consistency is firmer than normal, crepitates less freely, has a more uniform, homogeneous appearance upon its cut surface, and is less moist than normal lung tissue; a dark fluid will sometimes ooze from its cut surface, but not as freely as in hyperæmia, and the fluid is more watery in appearance.

A microscopical examination of lung tissue in this condition shows the capillary vessels filled with blood, and the alveoli containing a variable number of cells. In other words, it is a condition closely resembling that condition known as static pneumonia, but no inflammatory process exists; it is simply a stasis in the capillary circulation, accompanied by a slight increase in the cell elements in the alveoli.

Bronchial Tubes.—You will rarely make an autopsy

upon one who has died of typhoid fever, without finding evidences of a more or less extensive catarrhal inflammation affecting the bronchial tubes. So constant is catarrhal bronchitis present in this fever, that Dr. Stokes proposed to call typhoid fever bronchial typhus. In most cases this catarrh is not extensive, affecting only the larger bronchi; it may, however, extend to the smaller tubes and give rise to capillary bronchitis and broncho-pneumonia. Pulmonary infarctions are frequently found in the lungs of those who have died of typhoid fever. They are sometimes quite numerous, are usually of small size, and vary in appearance according to the stage of their development. When recent they are of a dark color, and feel like consolidated lung tissue; later, the color changes to yellow; they may soften and break down.

Larynx.—The larynx, as well as the bronchial tubes, is frequently the seat of catarrhal inflammation; less frequently it is the seat of diphtheritic inflammation. In connection with these laryngeal inflammations, ulcers appear in the larynx; these have received the name of "typhoid ulcers of the larynx;" sometimes they give rise to quite extensive hemorrhages. In connection with, or independent of these laryngeal ulcers, ulceration of the mucous membrane of the mouth and pharynx may occur; at times it involves the epiglottis in such a manner as to clip off its edges. These ulcers may develop on the mucous membrane of the Eustachian tube. In those cases where permanent deafness follows an attack of typhoid fever, usually it will be found due to ulceration of the mucous membrane of the Eustachian tube.

Brain and Nervous System.—As yet we have not been able to determine whether there are any structural changes in the brain or nervous system so constant that they may be regarded as lesions of typhoid fever, although it is reasonable to infer that in a disease where such severe functional disturbances of the cerebro-spinal system exists there must be constant and definite parenchymatous changes. Œdema of the pia mater and of the brain substance, with occasionally quite extensive adhesions of the dura mater to the cranium, not infrequently exist. Punctate extravasations into brain substance are found in a certain number of cases, but even in severe cases they are not always present.

Stomach.—The changes which occur in the stomach are equally important with those that occur in the other internal organs, and are degenerative in their nature. Softening and degeneration of its glandular structure is sometimes so extensive, that if recovery from the fever takes place, a very long time must elapse before the organ can perform its normal function. It is the existence of these degenerative changes that gives rise to the disturbance in digestion which is present in so many cases, not only during the continuance of the fever, but during convalescence.

Muscles.—In addition to the degenerative changes which I have described as occurring in the internal organs in typhoid fever, I must say a word concerning the degenerative changes which so recently have been found almost invariably present in the voluntary muscles. This muscular degeneration is of two varieties: first, a granular degeneration which corresponds to ordinary fatty degeneration. Second, a waxy degeneration, which consists in the conversion of the contractile substance of the primitive bundles into a homogeneous, waxy shining mass. Often both forms of degeneration occur together, sometimes one and sometimes the other predominating.

Progress of Medical Science.

Open Communication of the Ventricles with the Subarachnoidal Spaces.—Profs. Axel Key and Gustave Retzius recall to mind the description which they have given (*Nord Med. Arkiv*, Bdt. 6, No. 5, and *Studien in der Anatomie des Nerven-Systems und des Bindegewebes*)—which were based on direct researches and on injections of the subarachnoidal spaces and the ventricles—of the three apertures (apertura inferior or foramen Magendii, and aperturæ laterales) in the wall of the fourth ventricle. These are apertures by which all the ventricles of the brain are placed in open communication with the sub-arachnoidal spaces. They also refer to their preceding dissertations, which prove that abnormal products in the cerebro-spinal spaces may have their source in the ventricles, and vice versâ.

In the present article, they give the history of a case in which a severe hemorrhage in the ventricles, which occurred during life in a girl twenty-two years of age, previously healthy, caused sudden death. All the ventricles of the brain were filled with coherent clots; the right lateral ventricle, from which the hemorrhage evidently proceeded, was the most strongly distended by them. The clots of the different ventricles communicated with each other by the foramen of Monroe and the Sylvian aqueduct, and from the fourth ventricle the prolongations of the coagulum projected from the ventricle through the three above mentioned apertures, and was immediately continuous with the coagulated blood which was spread out over the base of the brain in all the great subarachnoidal basilar cisterns there located, and which have been described in detail by these authors in the previously mentioned articles. From these cisterns the extravasation of blood was continuous, under the form of a sanguinolent mélange, with the subarachnoidal fluid over the great hemispheres. Below, it extended along the dorsal surface of the spinal medulla, as far as the cauda equina, in the form of a coherent coagulum, but in front the coagulum terminated at the upper portion of the back. With the efferent cerebral nerves the blood continued into the arachnoidal sheaths and into the plasmatic canals described by our authors. Thus it advanced by the arachnoidal sheath of the optic nerve on each side as far as the eyeball; with the auditory nerve to the lamina cribrosa. The motor ocularis communis and its orbital branches presented their plasmatic canals injected with blood, etc.

This case, taken as a whole, thus resembles completely the injections which the authors have obtained with coagulating masses, and which they have described in their large work, previously mentioned. The important point is, that here the injection was produced during life. This proves, obviously, that all the communications described by our authors between the external and internal cerebro-spinal spaces existed during life, and that an abnormal admixture with the cerebro-spinal fluid may extend from one point throughout almost the entire nervous system, and that more than one abnormal condition of a peripherical nerve, as for example, here the injection of the plasmatic canals of the motor ocularis in the orbit, might have its source even in the cerebral ventricles.—*Nordiskt Medicinskt Arkiv*, 8de Bandet, No. 5.

The Chamber of Deputies have voted 13,000 francs, to establish a lectureship on Brain Diseases and Mental Pathology, at the University of Paris.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, September 23, 1876.

HOTEL PHYSICIANS AND RURAL PRACTITIONERS.

THE recent letter of a correspondent from Saratoga regarding the relations said to exist between temporary and permanent medical residents of that place, has directed considerable attention to the subject. The correspondent in question makes certain charges which he says he is able and willing to substantiate, while on the other hand an equally trustworthy gentleman denies these charges in toto. From what we know of the physicians who are said to be guilty of unprofessional conduct, we believe that the plaintiff has been misinformed concerning the facts of the case. In any event, it opens a question connected with professional interference one with the other, the discussion of the principle of which may be excusable upon the possibility of the charges being founded upon fact. In any individual interpretation of rights and privileges there is always a tendency to exaggeration, always a temptation to magnify apparent differences of opinion into real and wilful wrongs. But, impartiality of judgment is always best rendered upon the middle ground of conservatism.

Our Saratoga correspondent, upon his own testimony, is certainly wronged by such metropolitans as may come during the harvest of the fashionable season to gather the golden sheaves of hotel patronage, and prevent him from the legitimate exercise of his usual professional privileges. If, as he says, there are some extraordinary means used on the part of the professional visitors to obtain practice, he is perfectly right in complaining. If, as the other side claim, no such means are used, and that the competition is honorable, our correspondent becomes too partial an advocate of what he considers to be his individual rights. We do not pretend to say that he is purposely wrong in his conclusions; but for the sake of using his argument against practices which we know to exist elsewhere, we unhesitatingly endorsed the principle involved in his complaint. As giving us the foundation for some general remarks upon the subject, we are willing to leave Saratoga entirely out of the question, and refer more particularly to other fashionable resorts where such questionable professional practices are quite prevalent.

It is generally conceded that no medical gentleman, because he lives in a certain locality, has the right to monopolize the practice there; to farm the community as if he owned it, and to dispute the right for honorable competition with his peers. A physician who is regularly qualified to practise has a right to ply his profession anywhere and everywhere he pleases, and to change his base of operations as often as it may appear to him desirable. He belongs to the people at large, and has the right and privilege to give his services to any one who may desire it, whether that patient be at Virginia Springs, Saratoga, Newport, Long Branch, Cape May, or any other fashionable resort. The mere fact of the physician being a temporary or permanent resident at any of these places has nothing whatever to do with the question at issue.

While we must be ready to admit that the rural practitioner can hardly look upon this division of labor in a strictly impartial manner, he has no remedy, provided the competition for patronage is strictly honorable. When the latter is not the case, he has a right to stigmatize those who interfere with him as mere travelling quacks.

Medical men of reputation are always in demand everywhere, and are likely to be sought by strangers whether at hotels or any other place. The wider this reputation, the more likelihood for this so-called chance practice. Such men do not need to advertise their presence in hotels, as it becomes a matter of interest to their would-be patrons to discover their whereabouts for themselves. If a patient in a hotel desires to call in such a medical attendant for advice, there can hardly be a question of its propriety. Every medical gentleman, however, admits this. On this score it is very easy to explain why some metropolitan physicians have always plenty to do wherever they may go—entirely irrespective of the presence of resident practitioners. This is as it should be, and is the reward of honest reputations for professional proficiency.

But this can hardly explain the presence of the now so fashionable hotel physician, the temporary appearance of whose sign in the hotel office is a purely business bid for the advantages of the situation. We have yet to learn that these hotel physicians as a class are any more competent than the resident practitioners of the neighborhood. If so, what guarantee have the guests of the hotel of his proficiency in the absence of a well-earned professional reputation in the metropolis? Most of the selections are made on friendly considerations by the hotel proprietors, and there is a distinct business understanding that the said pro-

prietors will make themselves responsible for the fees of the guests by adding them to the board-bill.

There is also an understanding always implied, but not unfrequently expressed, that every effort will be made by the hotel proprietors and their attendants, from the "gentlemanly" clerk to the bootblack, to throw all the possible business of the house into the hands of the regular "hotel doctor." This practice certainly gives great reason for complaint on the part of the physicians resident in the neighborhood against what they have a right to look upon as an unwonted professional monopoly. It is radically wrong, decidedly unprofessional, and positively dishonorable for any medical man to lend his countenance to such practices, even in ever so indirect a manner, to those who, in a business way, desire to be his friends. We regret to say that too many of our transient hotel physicians are of this class, and deserve all the criticism which they are receiving from the so-called country practitioner. While we say that the latter has no right to claim all the practice of his neighborhood, the hotel physician has no more right to monopolize the attendance upon transient visitors. The latter object is so transparent on the part of at least the majority of the hotel physicians, that we have often wondered that any respectable medical man would allow himself to be known as such.

At the risk of being a trifle heterodox in our opinions, we do not see any necessity for having hotel physicians at all. We cannot see why the resident physicians in the neighborhood of the large hotels, except perhaps on extraordinary occasions, cannot attend to all the necessary practice and divide it among themselves. If there are any rights at all in the matter, these gentlemen have the preference to the medical man who merely lives in the hotel during the season for the sake of making what money he can in the shortest possible time. As the case now stands, there is a prejudice on the part of the resident practitioners against the typical hotel physician, which is in the highest degree detrimental to general professional interests. Consultation, as a consequence, is not encouraged, and bitter professional animosities are engendered. The hotel physician is constantly changing from year to year, and has no possible opportunity for acquaintance with his professional brethren in the neighborhood. They are apt to look upon it as a slight, the magnitude of which is not lessened by the circumstances of the unwonted superiority which the new-comer assumes.

There can be no argument in favor of the hotel physician which cannot be made to apply to the average practitioner of the vicinity. In fact, a sense of ordinary fair dealing would concede to the latter all the advantages which might drift in their way, in preference to one whose only real claim to such extra chances are based on a mere business understanding with an hotel proprietor.

Reports of Societies.

INTERNATIONAL MEDICAL CONGRESS.

SECTION OF MEDICINE.

This Section convened Monday afternoon, September 4, 1876, at 3 o'clock, with Dr. Howard in the chair, and Dr. J. Ewing Mears, Secretary. Dr. J. J. Woodward, Surgeon U. S. A., Reporter, read a paper on

"TYPHO-MALARIAL FEVER; IS IT A SPECIAL TYPE OF FEVER?"

After a general introduction, in which he referred to the duration of war as an element of mortality from sickness, and to the statistics of the Prussian army during their last great war, he discussed the subject of camp fevers in our army, especially when complicated with malarial influences. He sketched the history of typho-malarial fever, as reported by different surgeons, and argued that such hybrid combinations were not new in armies, illustrating this with historical facts. He contended that typho-malarial is not a special type of fever; it is no new disease, but a hybrid. He referred at considerable length to those who had sustained his views, and to others who had opposed them.

Dr. Bartholow, of Cincinnati, replied to the charge of acrimony made by the reporter against him. He said he had simply objected to the erection, by Dr. Woodward, of a new type of disease.

Dr. N. S. Davis, of Chicago, said he saw little need of controversy; he was almost surprised that it was necessary to combat the idea of introducing a new disease. The phenomena of this mingling had been common to him. In Chicago, malarial disease was the common form; typhus when it did exist, was imported. In the progress of filling up the city, the malarious influence had gradually disappeared, and for ten years typhoid was gradually on the increase, owing to the peculiar water arrangements. After a time typhus had predominated. To him it was a surprise that any criticism should be made concerning the two diseases being present at the same time. The sooner we recognize this capability for mingling among diseases, the sooner will we clearly recognize and understand the mingling in this case.

Dr. Scott, of Ohio, said he had always lived in a malarious country, and recognized this complexity and union of disease. Early, it was true, this mingling was not so pronounced, but as civilization advanced, it rapidly grew to be so. He thought these discussions were of use, because we do not understand the treatment of the affection. Quinine will not check it, although it can be used to check the malarious condition. He had seen scurvy, while in Nashville, in 1864, in connection with this disease, and he therefore agreed with Dr. Woodward.

Dr. Pepper said he feared the employment of specific terms in such cases, especially as it concerns young men, for it gives rise on their part to a lack of knowledge of the real danger present.

Dr. Reed, of Camden, objected to a term that signifies two specific affections.

On motion, the paper was referred to the Section for publication.

Tuesday, Sept. 5th.—The Section met at 2 P.M.

THE IDENTITY OF CROUP AND DIPHTHERIA.

The first paper was by J. Lewis Smith, M.D., Reporter, physician to the New York Infant's Hospital; subject, "Are Diphtheritic and Pseudo-membranous Croup Identical or Distinct Affections?"

He said the two theories are, first, that the two diseases are distinct; second, that the two are varieties and modifications of one and the same disease. He considered the various causes for believing croup a local malady:—Its causes are the same as in other inflammations which are local; there is a single tract of exudative inflammation in all cases, whereas in a constitutional disease other mucous surfaces would be likely to be inflamed sometimes; and because depressing remedies are tolerated. He gave facts showing diphtheritic laryngitis to be the manifestation of a general malady, such as its long incubative stage in certain cases; its severe constitutional symptoms, in some cases, before appearance of the inflammation; speedy death in certain malignant cases, and important evidence from the state of the kidneys. He next examined into the histological similarity of the two diseases and into the difference in the attendant laryngitis and pseudo-membrane, with an inquiry into the causes of such disease, the age of prevalence, results of treatment, etc.

Dr. Pepper said it was important that there should not be an innumerable number of diseases and disease names. In the present condition of the medical profession diphtheritic and croupal processes distinguish all diseases of the throat. We meet many grades of inflammation in the pharynx, and if we do discriminate thus carefully between these diseases, we must carry the same thing out in the larynx. In mild cases of sporadic pseudo-membranous pharyngitis, sequelæ are rare. Chemically and anatomically he had never been able to discover any difference between the diseases, nor has any microscopic distinction been discerned; constitutionally, also, it was impossible to discover any difference. He cited the fact that in a ward in this city, cases of diphtheria had occurred with at the same time strongly marked cases of croup. As far as treatment is concerned, any difference in effects cannot be taken as distinguishing between diphtheria and croup. Taking a cursory view of the subject, he thinks they are so many forms of the same disease.

Dr. Gibbons, of California, said that although it was contrary to his early teachings, yet he was compelled to learn the two diseases, and he was too old now to try to unlearn it. He thought that should the wheel turn and carry the present ideas down, in twenty years it would turn back again. He quoted two cases which showed a marked difference.

Dr. Woodward agreed with Dr. Pepper, and asked the question, "Whether Dr. Smith had used the first or second edition of Rokitansky's work," as the views did not correspond in the later edition with those previously expressed.

Dr. Hare, of London, drew attention to a paper that had been adopted by the Royal Society of England, to secure opinions on this subject.

Dr. Howard, of Canada, thought we needed a larger number of cases to settle the question; for himself he did not believe in duality of the diseases.

Dr. Holdwith, of Canada, reported some cases showing the duality of the affection.

Dr. Bartholow, of Cincinnati, believed in the duality, and thought the distinction was three fold. Dr. Maddin, of Nashville, expressed similar views, as did Dr. Ayres, of Indiana.

Dr. Harris, of Chicago, thought that we labor too much, as medical men, under the assumption that we have a right to definitely settle such questions. Let us publish our contributions, but let us wait before we decide. After remarks by Dr. Hamilton, of Nova Scotia, Dr. Cohen, of Philadelphia, yielded to Dr. Pepper, who introduced the following resolution:

That in view of the wide diversity of opinion existing in regard to the relationship of diphtheria and croup, the Section prefers to recommend the paper of Dr. J. L. Smith for publication, with an expression of their opinion of its high value as an important contribution to the literature of the subject, but without a definite expression of opinion upon the points at issue.

The motion was finally adopted, and reported to the Congress.

MEDICAL TEACHING.

Prof. A. P. Reid, of Halifax Medical College, Nova Scotia, read a paper on "Medical Teaching."

On motion of Dr. Davis, the Section tendered its thanks to the author, but did not refer it for publication.

Wednesday, Sept. 6th, 1876.—The Section met at 2 P.M. Dr. Stillé, in the chair.

NERVOUS DISEASES AND MODERN LIFE.

Professor Roberts Bartholow, Reporter, of Cincinnati, read a paper on the question, "Do the Conditions of Modern Life favor especially the Development of Nervous Diseases?"

He stated that insanity was frequently alluded to by ancient writers, of which he cited interesting examples; that senile dementia was a subject of judicial inquiry. Numerous references were made in Hippocrates and Galen to insanity and nervous maladies. The social and political state of ancient times were mentioned as an exciting cause of nervous maladies. After alluding to the moral epidemics of mediæval times, the dancing mania, etc., to the epidemics of cerebro-spinal meningitis, etc., he passed to the present state of neurological medicine, possible only after study of general and morbid anatomy and physiology had reached a certain development. Nervous diseases are now better differentiated, more carefully studied.

Statistics of insanity show apparent but not real increase, due to better census returns and better provision for the insane. Improvement in well-being of society results in diminished sickness and mortality rates, greater longevity. It is incredible that nervous centres should exhibit more vulnerability, and other organs of the body greater vigor. Highly probable the brain and nervous system have improved with improvement in other bodily functions.

Dr. Green, commending the paper, said the ancients were, no doubt, well acquainted with these diseases, and yet it was not said as now that they were overstrained. He thought the record afforded by insurance companies, announcing an increase, was due to the fact that more older men insured than formerly. He could not see that over-straining was a predominant cause.

Dr. Gibbons said ancient history did not afford data, for it only recorded the fact of the disease, nor could the statistics from insurance companies be so considered, as these were picked cases. He thought that if Dr. Bartholow had lived in California a few years he would have been impressed with the fact that these cases were on the increase owing to the excitement

arising from dealing in mining stocks, such cases occurring weekly. Many men have no family ties to anchor them, and, therefore, go rapidly to insanity or some other form of mental disease. The opinions expressed in the paper ought to be modified, especially as regards new regions.

Dr. Neftel did not doubt an increase, for these affections were transmitted either in an aggravated or modified form. The brain's intellectual sphere had been enlarged. The child of to-day knows more than did many of the ancients; and as great mental activity produces nervous diseases, there ought to be more now than formerly. The present use of alcoholic drinks is one cause of nervous affections, both directly and indirectly. Syphilis, which is another cause of nervous diseases, did not exist in former times, while it exists largely now. The records of the Pathological Institute of Berlin prove conclusively that many diseases of the brain which lead to death are caused by syphilis. Old physicians always tell us that the disease is increasing; and the fact that the causes producing nervous diseases have increased, ought to convince us that the disease also has increased.

Dr. Maddin agreed with the author of the paper, that there were no new diseases to which man was liable, but because of education and surroundings we had modifications of many diseases. People are different now from what they were two thousand years ago, and he thought our brains now were in a state of hyperæmia, and the stimulated condition of our minds rendered them more liable to disease.

Dr. Duffy, of North Carolina, related two cases which he thought would show that apoplexy was not due to nervous affections.

Dr. Arnold, of Baltimore, thought the specialists were to blame for the introduction of new diseases. He had been in practice thirty years, and he had more cases the latter half of the time, due to the fact of man's race for wealth. Intellectual men are long livers; he believed that shocks in business were worse than hard study. The nervous system always accommodated itself to the strain put upon it. He thought medical men allowed themselves to be governed by the hue and cry of professional temperance orators, for it could not be proved that alcohol had much influence in the production of nervous diseases. Instead of drunkenness being a cause of nervous disease, it was the first herald of its approach.

Dr. Davis said he thought the question could not be determined with any degree of certainty. He had been led to think that very few brains killed themselves by over-work. Physiological law is growth and strength and compactness; if there is not some corroding influence to interfere with the law, they will seldom wear out. Rush tells of a drunken club, the members of which nearly all died of nervous affections. The revolutionary war soon followed, and was a time of excitement, and yet these diseases diminished. It was not mental work that ever produced these affections, but rather troubled digestion, or the system was worn out by other means.

Dr. Howard, of Canada, thought hereditary tendencies wore themselves out, and that if we kept our general system in good form, common nervous affections would not occur.

Dr. Bowditch hoped the section would recommend the publication of the paper, with the statement that they did not vouch for one side or the other of the report, or decide it. Climate had much to do with our capacity for bearing stimulants. English people could not drink as much here as in their own country.

Dr. Green thought suicide could not be laid to nervous affections, as bad humor, love, etc., were more often causes.

Dr. Bartholow then discussed some of these questions. The statement of specialists ought to be taken with allowance; that the increase of their cases was due to their increase of practice. He thought men now were stronger and better than they ever were before.

Dr. Scott, of Ohio, said our modes of travel induced diseases unknown to us before; railway men would not live to the usual age in consequence of their avocation. He thought the custom of sending children to school early a bad one; we take them out when we ought to put them in. Our system of education was a very pernicious one, and we pay too little attention to exercise.

On motion, the paper was referred to the committee for publication.

ETIOLOGY OF EPILEPSY.

Dr. W. B. Neftel, of New York, read a paper on this subject.

After referring to the phenomena of epilepsy artificially produced in the guinea-pig, depending on traumatic reflex paralysis of the cerebral blood-vessels after cerebral commotion, and arguing from this to human epilepsy, the speaker thus summed up his conclusions:

1. It is evident that in a perfectly healthy person, free from hereditary predisposition, epilepsy can be brought on by traumatic influences on the head, causing cerebral commotion, without structural lesion.

2. Further investigations will have to prove that traumatic influences during childhood constitute a most frequent etiological moment in its development.

Dr. Davis moved the paper be referred to the committee for publication.

Thursday, Sept. 7th.—In the absence of the President, Prof. R. P. Howard, of Canada, Vice-Chairman, occupied the chair.

PHTHISIS AND HIGH ALTITUDES.

Dr. Chas. Dennison, of Denver, Colorado, Reporter, then read a paper on "The Influence of High Altitudes on the Progress of Phthisis."

Deductions were drawn from the analysis of sixty-nine years spent by sixty-six consumptives in Colorado, and from corroborative evidence of others, as follows:

1. Cool, dry climates are best. 2. Favorable climatic attributes, such as diathermancy and dryness, are increasingly found with increasing elevation. 3. High altitudes are favorable in incipiency of chronic inflammatory and hemorrhagic cases of phthisis; in others, the more acute the inflammatory process or more active the pulmonary hemorrhage, the more tentative should be the rise in elevation. 4. Partial recovery necessitates permanent residence. 5. High altitudes become unfavorable or negative in proportion as phthisis is complicated with certain forms of cardiac disease, or the stage of "softening" in acute cases, with extensive deposit, or nervous irritability and lack of desirable will power. 6. Early change of climate and mode of life are more positively favorable to cure in a resort to high altitudes. 7. Stimulating effect of high altitudes on respiratory organs is a most important agent in arresting chronic phthisis. 8. High altitude is palliative or curative with or without change of occupation and out-door life. 9. In incipient cases the patient should receive benefit of doubt, in view of

possibility of error in declaring non-existence of phthisis. 10. Resort to a well chosen, elevated climate should form part of a physician's advice to every consumptive, unless specially contraindicated.

Dr. Rosebrugh, of Canada, said another paper was to be read on a like subject, and thought time might be saved by listening to it first. Dr. Dennison objected, and said he had left out everything that referred to the other subject.

Dr. Duffy, of North Carolina, thought the question of moist atmosphere important. He had seen coughs contracted in dry weather yielding in moist. Habits of life had much to do with the contraction of consumption; outside of his State people shut the doors too much, instead of putting on more clothes. There was little danger from sudden changes provided the system was all right. The air in California is heavily laden with moisture, and that has much to do with the freedom from consumption, or at least did not add to its prevalence.

Dr. Baldwin, of Florida, said he had been interested in the subject for thirty-eight years in his own State. He doubted the beneficial results of altitude, because in Florida good results were obtained even below the level of the sea. Consumption had really been cured; he knew this from post-mortem examinations; the change did this. He spoke of oxygen being considered a panacea, and doubted very much its efficacy. The effort necessary to get this oxygen militated against its value. It could be gotten in Florida with much less trouble than in Colorado. Rest was of the greatest use. Sudden changes such as we see on the plains of the West, even to the extent of sixty degrees in a day, can never be good; in Florida this change is about fourteen degrees.

Dr. Gibbons desired to know if out-door life was associated in the treatment. Dr. Dennison replied that it was. Dr. Gibbons thought the reporter's conclusions were warped by local feelings; the ideas expressed were different from those given him in a letter received not long ago. The statement that California had a moist climate was unfounded; it was absolutely dry. He had looked for cases of consumption, but had failed to find them; he thought this due to the equable climate. There were plenty of climates in California, one every ten miles. He prescribed when a patient came to him, "to get on a horse and look out for a climate for himself."

After remarks by Dr. Baldwin and Dr. Stewart, of Minnesota, Dr. Gibbons, of California, moved the same resolution be adopted in regard to this paper as was adopted in that of Dr. Bartholow, which was agreed to.

Dr. Henry MacCormac, of Belfast, Ireland, being absent, the Secretary read his paper on "The Open-Air Treatment of Consumption." The paper contended that all tubercular deposits, no matter where situated, are ascribable to habitual respiration of air already breathed, proof being given, to the writer's satisfaction, from observation and chemical analysis. He said that tubercle is only the effete waste of the animal organism; when effete tissue is not oxidized, it is not expelled as carbonic acid. No other theory, no other treatment than open air, was, in his view, tenable.

Dr. Edge, of Camden, believed in the medium as to altitudes.

Dr. Madden, of Tennessee, thought we ought to give more attention to the stomach. He believed if the patient could digest oily matters he would be better.

Dr. Davis said he could not understand the law of logic or the law of nature, exhibited by sending a patient on horseback out into the open air to breathe more oxygen, and at the same time to give him more alcohol which consumes the oxygen.

He then offered a resolution to refer Dr. MacCormac's paper back to the author on account of its very dogmatic character, which was carried.

The discussion of the previous paper was then resumed.

Dr. Johnson, of Illinois, said he had known consumptives recover that went to Colorado, Florida, North Carolina, Georgia, Tennessee, the south of France, etc., etc. They all came back enthusiastic over the change of scene and climate. It seemed they had all had good food and exercise, etc. The idea of introducing altitude into the discussion was perhaps unnecessary, but it was a fact that cases in the early stage were benefited. Those in the second stage need a warm climate.

Dr. Hare, of London, thanking the author for his observations, mentioned the fact that in Iceland and Norway consumption did not exist. He wished the doctor to continue his observations. He objected to the use of alcohol because it induced drunkenness.

Dr. Davis joined with the last speaker in the hope that Dr. Dennison would continue his observations. He then moved that the resolution in reference to Dr. Dennison's paper, which had been laid on the table, be taken up for consideration.

A member from New Jersey asked Dr. Dennison whether his paper took into consideration the physical advantage of living in a high altitude?

Dr. Dennison said he had; he had not read all of the paper; the omitted portion would reply to many of the points mentioned.

Dr. Howard, the Chairman, was personally interested in the paper, and quite agreed with some of the other speakers, that there were not similar papers written by people living in a higher altitude.

Friday, September 8th. — The Section met at 2 o'clock, President Stillé in the chair.

ULCERS OF THE STOMACH.

Dr. Charles W. Dulles, of Philadelphia, read a paper translated by him from the French of Dr. H. Lebert, formerly Professor of Clinical Medicine at Zurich and at Breslau, on the "Treatment of Simple Ulcer of the Stomach."

Dr. O'Hara spoke especially of boiled milk in the treatment of the disease.

The President, in reply to certain remarks, said the disease was very frequent, more so than is usually supposed. Speaking of the use of concentrated milk, he said that some people could only digest cold victuals. One case was benefited, although the case was not, it seems, clearly diagnosed, by milk and lime water, but this eventually failed. When on a trip to Germany absolutely cold food was prescribed, and the patient recovered. The food must be made cold by ice.

Dr. Gibbons, of California, spoke of the treatment by opium and bismuth, and also with nitrate or oxide of silver.

Dr. O'Hara referred to the use of condensed milk, and in another case milk warm from the cow was beneficial.

Dr. Smith, of Iowa, spoke of shaved ice as proving successful in one case.

Dr. Mason, of New York, said that milk with the water evaporated out had also been successful.

The subject was referred for publication.

PROGRESSIVE PERNICIOUS ANÆMIA.

Dr. Howard, of Montreal, read a paper on this subject, with observations upon the ante- and post-mortem conditions observed in that affection. Having reported four cases of the disease observed by himself, he analyzed the circumstances under which sixty-two examples of the affection occurred, arranging them under the heads of pregnancy, parturition, chlorosis, chronic diarrhœa, blood-waste, dyspepsia, extreme poverty or poor diet, jaundice, and "failing health." The post-mortem appearances in fifty-one autopsies are reviewed, with observations on microscopic characters of the blood regarded by Eichorst as diagnostic, and the paper terminates with the following conclusions:

1st. The various forms of anæmia may occasionally take on progressive and pernicious characters. 2d. Such is frequently the case with anæmia of pregnancy and parturition; the converse is true of chlorosis. 3d. A distinct variety of anæmia, having etiology and pathogeny peculiar to itself, "progressive pernicious," is not proven. 4th. Neither spleen nor lymphatic glands usually present any, much less any special lesion in pernicious anæmia. 5th. It remains to be proved that hyperplasia or other change of the bone marrow is a cause of anæmia. 6th. If it be a cause, it has yet to be shown whether it is the cause of a variety that should be especially styled pernicious and progressive, the weight of evidence appearing to be opposed to it. 7th. It is premature to regard pernicious anæmia as a myelogenous pseudo-leukæmia. 8th. Pernicious anæmia is perhaps rather more frequent in females than in males, but the difference is not very great.

Dr. Davis, of Chicago, said he should feel disposed to hold in entire abeyance the view that there is an especial disease called "progressive pernicious anæmia." In one case in which no post mortem was obtained, the blood, on examination, showed a very few red blood-corpuscles, with an abundance of white ones. But there may be a class of affections in which the blood is materially changed. The office of the red cells is not perfectly understood, and therefore we cannot appreciate the disease.

On motion, the paper was referred to the committee for publication.

ALCOHOL AS FOOD AND MEDICINE.

The next paper was by Dr. Ezra M. Hunt, of Metuchen, N. J., on "Alcohol in its Therapeutic Relations as a Food and a Medicine."

The paper reviews its claims as a food and a medicine, and the arguments pro and con adduced in regard thereto. The author examines the experiments of Duroy, Binz, Rickards, Parkes, Anstie, Hammond, Richardson, and others, and the testimonies as to its thermic nutrient and molecular effects. Facts are adduced to show that present methods of prescribing alcohol secure neither uniformity nor accuracy. From the amount of imitation and of artificial manufacture, would it not be better the medicinal article should always be artificially prepared, and certified by manufacturers? The whole subject of alcohol, and the different effects of members of the alcohol series, should be carefully restudied. Differences of result are really often differences in the kind and quantity of alcohol contained.

(The writer's conclusions will be found in the report of Saturday's general session.)

The paper was referred to the committee for publication.

SCLEROSIS OF THE LUNG.

Prof. Rudnew, of St. Petersburg, Russia, read a paper on "Sclerosis of the Vessels of the Lung," by Dr. Beresnewitsch, of the Institution of Pathological Anatomy at St. Petersburg. The atheromatous process has been described by some writers, as affecting branches of the lung arteries, with heart complications, or, when the lungs are themselves affected, with atrophy or emphysema. Dr. B. argues that emphysema was the sequence rather than the cause. His inquiries, based on microscopical investigations, are: 1. What arteries are directly affected, whether bronchial or pulmonary? 2. Under what conditions is the disease generated? Dr. Isaacson had found it was always due to an affection of the lung-vessels. Dr. B. describes the changes which take place in the blood-vessels, and ascribes much of the destructive action to syphilitic infection in the capillaries, and afterwards in the larger arteries. Sclerosis is due to development of connective tissues, between the layers of which the coating consists.

The paper was referred to the committee for publication.

The Section then adjourned *sine die*.

SECTION OF SURGERY.

The Section held its first session, Monday, September 4th. Prof. Joseph Lister, of Edinburgh, in the chair; Dr. J. H. Packard, of Philadelphia, Secretary.

Prof. Lister, after acknowledging the honor, and paying a compliment to American surgeons and to Philadelphia, and referring to the numerous original operations first performed in this country, stated that he had been influenced in his decision to visit this country by seeing on the programme of the Congress mention of a proposed discussion on antiseptic surgery.

ANTISEPTIC SURGERY.

Prof. John T. Hodgen, of St. Louis, Reporter, read a paper on this subject. The propositions discussed by him were the following:

1. Putrefaction may and does occur in the solids and liquids of the body both with and without the direct contact of germs borne in the air or water.

2. Putrefaction of the solids and liquids of an open wound may in many cases be prevented if the contact of living germs with the surface is not permitted, or by destroying their vitality after contact with it.

3. It is possible that the living solids and liquids of the body may be so altered that they shall not furnish the conditions necessary to putrefaction.

4. Practically, the conditions to be met in preventing putrefaction are so difficult, that in many cases it is impossible to comply with them. Yet, even partial success is eminently worthy of our best efforts.

Dr. A. Hewson, of Philadelphia, said that he had tried all forms of antiseptics, but relied now chiefly upon earth or salicylic acid. He believed that dryness was the essential element in any dressing. He never used a ligature, but employed acupressure or torsion. He always used gauze and collodion instead of adhesive plaster, and never allowed water to be used upon a wound during any stage of its treatment. Perfect quietude of the part, infrequent dressings, and the exclusion of any but the actinic rays of light, by a covering of blue paper, all assisted greatly in rapid healing.

Dr. J. H. Pooley, of Columbus, Ohio, said he was very fond of carbolic acid, in the proportion of one to seven of olive oil, freely brushed into a portion of the wound. Under this dressing he had seen wounds in which the time of healing had been reduced from months to weeks. He then spoke of the repressive power which carbolic acid seemed to exert upon granulations after long continuance of application and the necessity for change of dressing. The speaker had had but little experience with salicylic acid, but in one case its application had caused severe pain for an hour.

Dr. Hewson replied, that in the dressing of amputations, etc., salicylic acid gave no pain, but in open wounds it did.

Dr. Wm. Canniff, of Toronto, Canada, said that he fully believed that the air was inhabited by living organisms; but he thought it was still a question whether putrefaction was due to the action of these germs. If Dr. Hodgen's first conclusion was sustained, he submitted that the doctrine urged by Prof. Lister was undermined.

Dr. Hodgen explained that he did not intend to convey the meaning that germs were not present in all cases of putrefaction. The organisms could be introduced in part through the blood.

Dr. Canniff argued that if germs could reach the part through the lungs, etc., it was of no use to exclude them from the wound. He believed that putrefaction could occur without the action of these organisms. The cells of the body had a definite time to live and die, and if, as in a contused wound, these cells had their vitality crushed out of them, they must die. Some would live, others perish, and sequestration was by the process of natural laws. It was asking a great deal to request us to believe that all this was due to air germs, and his own experience refuted it. He then referred to several severe accidents in which, under cold-water dressings, no suppuration had occurred. He believed the results of the Toronto Hospital were as good as any in which the antiseptic system was used. He used antiseptics, not to destroy air-germs, but to arrest putrefactive decomposition due to chemical changes. Cleanliness, rest, and pressure, he considered the essential elements in the treatment of wounds.

Prof. F. H. Hamilton, of New York, referred to the method of treating wounds by leaving them open and exposed, claiming for it an excellent success both as regards rapidity and freedom from suppuration. At St. Francis Hospital, the warm-water treatment had been largely adopted, the part being submerged in the liquid at a temperature of about 95°. To arrest gangrene, 110° was required. The method was an exceedingly simple one, and he claimed that erysipelas, gangrene and pyæmia were almost unknown in their wards.

Dr. J. A. Grant, of Ottawa, Canada, said that although formerly well pleased with cold-water dressings, after a visit to Edinburgh he was thoroughly satisfied that the antiseptic treatment, if properly conducted, would yield better results.

Dr. R. A. Kinloch, of South Carolina, called attention to the importance of absolute rest in the treatment of wounds, and thought that much of the credit claimed by a particular system might be attributed to quietude.

Dr. F. H. Hyde, of Cortland, N. Y., thought that sufficient importance had not been given in this discussion to the fact of the constitutional condition of the patient. Every surgeon knows the same accident or the same operation is followed by far different results. The speaker also testified to the fact that wounds entirely free from dressings did remarkably well.

Dr. J. L. Atlee, of Lancaster, Penn., had lately used chloral hydrate, five grains to the ounce of water, upon several old ulcers. The result was most happy.

Dr. J. T. Carpenter, of Pottsville, Penn., said that in the late war he had treated one hundred cases of hospital gangrene with creasote, and with but two deaths—one from erosion of the artery, the other from thrombosis and heart-clot. This was before the germ-theory was recognized.

Dr. J. Ashhurst, of Philadelphia, thought Dr. Hyde had struck an important point when he emphasized the importance of the constitutional condition of the patient. He was surgeon at two hospitals—the one general, the other for children. In the latter he never lost a case from operation, although the inmates were drawn from the lowest, half-starved class. He attributed this to their freedom from liver, kidney, and other diseases. He believed in constitutional treatment and in good hygiene.

Tuesday September 5th.—Prof. Lister being requested to close the debate, said he had not time to speak fully on the subject, but he would endeavor to answer a few of the objections raised by various persons. First, in regard to the trouble. He thought much of this was occasioned by improper or inefficient apparatus, or unfamiliarity with its use. Any new method, or new operation was a trouble until one has learned the different steps by practical experience. Moreover, he thought it was worth some trouble to be able to dress a wound, an amputation, or an exsection with the absolute certainty that the injury would heal quickly and kindly, without suppuration. Although the operation itself might be accompanied by a little extra amount of inconvenience, yet when the shortening of the treatment was brought from months down to weeks, and the dressings were far less frequent, we should say that the advantage was decidedly in favor of the antiseptic plan.

Another objection made was, that other modes of treatment give good results; but he contended they were not the best results. With strict antiseptic treatment he could cut freely into a joint, or exsect a portion of bone with the feeling of absolute freedom from danger. And then the way the wound behaves. The blood becomes organized under the dressing, and cicatrization takes place without one drop of pus, and almost without granulations, a thing which could not occur save under strict antiseptic dressing. Again, to be able to open a chronic abscess of the spine without fear of fever, pyæmia, etc., requires strict antiseptic treatment. In acute abscesses it is a satisfaction to know that after free incision and pressing out of the pus, not one drop more would appear. In ligation of an artery near a main branch, it is certainly a comfort to feel that no danger is to ensue.

The reporter had raised the point that putrefaction may be due to development of germs from within the body, but every simple fracture disproves this. In every simple fracture there is a severe wound, even if the surgeon does not see it; and if mere feebleness of tissues would lead to putrefaction, it should be seen in every such case.

In chronic abscess, the lining membrane is at first in much the same condition as cicatricial tissue with the epidermis stripped off, and in this condition is far more capable of absorption than afterwards, when it has assumed more of the character of granulations. The greatest danger in opening such an abscess is within the first few days. The speaker said he now used absolute phenol, which was very nearly pure; the solubility and absence of odor were in direct proportion

to the purity of the drug. The pure would dissolve in sixteen parts of water, and in proportion to its solubility is it unirritating. As a detergent, in the proportions of one to twenty, carbolic acid has no equal. Tirsch of Leipsic used salicylic acid, but has returned to carbolic, for purposes of spray.

Prof. L. then showed his atomizer, made by J. Gardener, of Edinburgh. By an arrangement of one tube within another, the vaporization of alcohol is effected, and this being burned produces a rapid boiling of the water, thus securing a large and minutely divided stream of the spray. The flue spray is less irritating to both patient and surgeon, and scarcely moistens even the clothing. The surgeon should always see the spray, so that he may be sure that he is working in it; his hands or instruments should never be outside of this stream of atomized fluid during the whole operation. Should a knife fall without it, it must not be used until again made antiseptic. Everything, sponges, instruments, the operator's hands, skin of patients, etc., must be first soaked with the carbolic solution, 1 to 20. The finger nails even should be cleansed with a brush. Catgut ligatures rendered antiseptic are alone used, both ends being cut off.

In dressing a fresh wound, Prof. L. used a piece of oiled silk covered with a thin layer of copal varnish, in order to protect the surface from the direct effects of the carbolic acid; over this were placed numerous layers of the carbolized gauze, loosely wrapped around; then a layer of Mackintosh cloth, the whole being retained by a bandage of the carbolized gauze, the spray continuing to play upon the part during the entire operation of dressing. No change need be made until the discharge begins to soak through, when the superficial dressing should be removed under spray, but the deeper ones need not be disturbed for weeks. For private practice, a small hand atomizer can be carried about in a box without trouble, and small portions of the dressings removed at a time.

The gauze is simply very coarse open meshed cotton cloth, filled with a preparation of carbolic acid one part, resin five parts, paraffine seven parts; these are melted together, and forced into the cloth under pressure—the apparatus for the Edinburgh Hospital costing only £10. Prof. L. stated that, instead of being an expensive dressing, this gauze, which was capable of being re-carbolized, could be prepared so that the cost in the end would be scarcely more than a penny a yard. A hospital in which the antiseptic treatment was thoroughly used would cost less per bed than one where the ordinary dressings were employed.

The speaker then described the difficulties which he had had with the spray producer, and while he acknowledged that he would gladly dispense with it, he did not see how it could be done. He had also been experimenting diligently to perfect the antiseptic catgut ligature, and he thought he had at last met with success. The material in which he was now preparing his ligatures was a mixture of carbolic acid, glycerin, water, chromic acid, and spirits of wine. In regard to the danger of throwing the spray upon the peritoneum, he had frequently done so in the operation for strangulated hernia, without any evil effects; and Keith, Nussbaum, and others have spoken highly of the antiseptic treatment in the removal of ovarian tumors.

He liked salicylic acid to sprinkle upon wounds on which dressings were to remain for weeks, as the under layers would, when saturated with carbolic acid, sometimes become offensive to the smell, although no putrefaction occurred, nor were organisms to be found. This fetor is due to chemical, not putrefactive changes, and therefore salicylic acid will destroy this odor better than carbolic.

Again, where carbolic acid, long continued, sets up an irritation of the skin, salicylic acid powdered upon it answers an admirable purpose, while it does not interfere with the action of the antiseptic. The speaker then detailed at length his experiments upon the development of germs, and also his many trials in preventing their entrance to certain fluids, as urine, milk, etc.

He was replied to by Dr. T. E. Satterthwaite, of New York. The discussion, which was quite interesting, will be published in the volume of Transactions of the Congress.

TREATMENT OF ANEURISM.

Wednesday, September 6th.—Dr. Van Buren, of New York, Reporter, read a paper on the "Medical and Surgical Treatment of Aneurism."

After a brief word on etiology, and reference to the great value of Holmes' recent lectures on the subject, he spoke of the increasing favor with which medical treatment of aneurism is at present regarded—as Tufnell's method, and of drugs which have been tested, including iodide of potassium. He then discussed the value of carbolized catgut ligature and silver wire, as used by B. Howard; and raised the question whether the Hunterian principle had not been carried to excess by English and American surgeons, and concluded affirmatively as regards larger arteries near the heart. He thought it inapplicable also, to gluteal aneurism, for which he made the original suggestion that the iliac arteries might be effectually compressed by a hand *in recto*, whilst the tumor was being laid open. Distal ligature and compression were illustrated by some recent and interesting American cases, and various forms of compression noticed. In connection with a recent operation on the left subclavian, within the scaleni, Dr. Van Buren discussed the propriety of attempting this operation, and briefly noticed the present attitude of electrolysis, coagulating injections, the introduction of foreign bodies, etc., emphasizing the value of Esmarch's bandage in connection with several of the more modern methods.

Mr. Joliffe Tufnell, of Dublin, said he had brought with him both wet specimens and drawings, which would show what had been accomplished by the system which he advocated. Finding it was not necessary to entirely occlude the vessel, to accomplish a cure, he had placed his patients upon their backs, with good, nutritious diet, which, with reduction of the heart's action, had accomplished several very remarkable cures. In regard to lowering the pulse, a little calculation will show that bringing the pulse down from 86 to 56, will make the total heart-beats 43,000 less per day. For hope of success, the aneurism must be upon the anterior wall of the vessel, the sac must be entire, and there must exist a fibrinating power in the blood.

The gentleman exhibited numerous specimens of cure, and said three months would usually produce this result; but he had caused coagulation in twelve days in a popliteal aneurism. In a limb the member is kept about six inches above the level.

Dr. J. H. Pooley spoke of the advantages of Esmarch's bandage, in rendering feasible the operation of laying open the sac and tying both ends.

Dr. A. C. Post said that the plan last mentioned was hardly applicable to idiopathic aneurisms, although undoubtedly the best in traumatic cases.

Dr. George A. Otis, U.S.A., said the reporter had cited one case of ligation of the subclavian as a solitary example of wound of that vessel in which immediate death had not occurred. This was obviously an error, as several such cases have been recorded by Billroth, and in the Surgical History of the War of the Rebellion, where injuries of this vessel had not proved fatal for several days—in two cases at least, ligation having been performed. The securing of the artery was therefore a justifiable operation.

Dr. J. Ashhurst spoke of the success attending ligation of the femoral in diffusive aneurisms. In these cases he would use Esmarch's bandage, or a tourniquet to guard against hemorrhage.

Dr. S. F. Spier, of Brooklyn, showed an artery constrictor which ruptured the internal and middle coats of the vessel, thus plugging it with its own contents.

Prof. Lister said he had seen a case in Mr. Syme's practice, which had been put to bed for a few days preparatory to ligation of the femoral, for popliteal aneurism. When brought to the operating table the pulsation had ceased, thus beautifully illustrating the value of Tufnell's method. He thought the question should not be, whether the aneurism was idiopathic or traumatic, but rather which was the operation attended with least danger. Ligature of the bronchial would not cure an aneurism at the elbow, be it either traumatic or idiopathic, simply because the anastomosis was so free.

He spoke also of the element of diseased arteries in idiopathic cases, and also as to the varying forms of aneurism, either of which might influence the method of operation. He thought there could be no danger with the abdominal tourniquet, as suggested by Prof. Van Buren, if a sponge was always placed under the pad and slight pressure be accurately made.

In regard to the antiseptic ligature, Prof. Van Buren had claimed that secondary hemorrhage could be avoided by its use, but by far its greatest advantage was due to avoidance of diffuse suppuration. With true antiseptic treatment, he had no fear of bad results, even although a pleural or peritoneal sac were opened.

In naevi the speaker now ligates the base of the tumor with carbolized ligatures, and then injects with hypodermic syringe from one-half to one minim of pure carbolic acid at numerous points. After ten minutes the ligatures are removed and the part simply covered with collodion.

AMBULANCES AND LITTERS.

A paper was then presented on this subject and read by title, translated by Dr. Wm. Ashbridge, of Philadelphia, from the French of Dr. Badoin, Médecin Major 8me Rég't. de Chasseurs à Cheval, France.

TREATMENT OF COXALGIA.

Prof. Lewis A. Sayre, Reporter, then read a paper on this subject, which elicited considerable discussion. The following were the conclusions deduced from it:

1st. Morbus coxarius is a disease peculiar to early childhood, or the age of reckless indifference.

2d. It is almost always of traumatic origin, and not necessarily connected with vitiated constitution.

3d. Rest and freedom from pressure of the parts involved, while at the same time the rest of the body is allowed free exercise in the open air, and a nutritious diet, is the best treatment yet devised.

4th. If this plan of treatment is adopted in the early stages, the majority of cases will recover, with nearly if not perfect motion, and without deformity.

5th. In the advanced second stage, and absorption cannot be produced, then it is better to puncture or aspirate the joint and remove its contents, than to leave it to rupture by ulceration.

6th. In the third stage, and the treatment here recommended has been properly applied without satisfactory improvement, but progressive caries continues, then exsection of the diseased bones is not only justifiable, but absolutely necessary.

7th. The operation of exsection of the hip is easily performed, and attended with no danger.

8th. After exsection of the hip-joint in cases of caries, the recovery is much more rapid and certain, and infinitely more perfect as to form, motion, and the usefulness of the joint and limb, than when left to the slow process of nature's exfoliation.

Thursday, Sept. 7th.—The discussion was opened on Dr. Sayre's paper.

Dr. Post, of New York, thought the reporter spoke strongly when he said the operation of exsection was without danger. All operations of that magnitude were dangerous; yet the ends justified the means in many cases.

Prof. Gross said he could not agree with the reporter's second conclusion. He had thoroughly investigated his cases, and was frequently unable to trace them to any other cause than cold, etc., acting upon a scrofulous constitution. The taint was always present in every case, and the disease could not occur without it.

Dr. W. H. Hingston, of Montreal, stated that he was formerly of the same opinion as the last speaker, but had lately entirely changed his views. He believed in its traumatic origin in almost every case. Dr. Moore, of Rochester, spoke in the same strain. Dr. Campbell, of Georgia, believed it was due to scrofula, as did also Dr. G. Cupples, of Texas.

Dr. T. G. Richardson, of New Orleans, asked, if the disease were of traumatic origin, why did we not have it following luxation of the head of the femur, etc. He said the age of "recklessness" was not the age in which it was most prone to develop.

Mr. Wm. Adams, of London, thought it was traumatic in the majority of cases; and where the injury could not be traced, the constitutional taint would be very marked.

Prof. D. H. Agnew, of Philadelphia, said it did not require a severe blow to constitute traumatism—a simple blow might be all-sufficient to awaken the disease in a vitiated constitution, and every child received such injuries frequently, without knowledge of parents. An accident was the exciting cause in almost every case, but behind this would be found, in the majority of cases, a scrofulous taint.

Dr. Grant, of Ottawa, said he had opened an abscess from coxalgia, and the pus was laudable. He did not believe in its strumous origin.

Dr Gross said laudable pus could never have come from true morbus coxarius. It was always curdy and flaxy.

Dr. Pooley, of Ohio, said if he had had the framing of the conclusion he would have made it even stronger, and would have said coxalgia was never connected with struma, save by accident of occurrence.

Prof. Lister thought, if struma existed at all, it certainly did in coxalgia, a disease corresponding in all its particulars to our idea of that term, *i. e.*, a languid inflammation.

The debate was further continued by Drs. McGuire,

Carpenter, Brodie, and others, after which Prof. Sayre replied to the various objections raised. The reporter's conclusions were voted on, and after considerable alteration, passed. Upon the following day they were referred back to the Section by the Congress, and after discussion were referred to the Committee of Publication, with indorsement of the Section upon all the conclusions except the second, on which the body could not unanimously agree.

EXCISION OF THE INFERIOR MAXILLA.

Dr. J. W. S. Gouley, of New York, Reporter, presented a report of a case of subperiosteal excision of the entire inferior maxillary bone, and solicited from American and foreign surgeons records of their unpublished cases, to add them to those he has already collected for analysis in an essay he is now preparing. The doctor's patient was a female nineteen years old, with phosphorus necrosis of four years' standing, involving the entire lower jaw. She was greatly disfigured by a very large under jaw, made up of an enormous involucrum, rendering mastication impossible. March 19, 1864, the patient having been etherized, the entire jaw was removed by external incision, and she made an excellent recovery. When last seen, seven and a half years after the operation, the bone reproduction extended from the body to the rami of the jaw.

He said it was not common in phosphor-necrosis to find an involucrum, but in his case there was one, while there was none of the pumice-stone deposit of Stanly. He explained this by the violent phlegmonous periostitis which occurred a year previous.

As regards various operations, chiefly modifications of the external incision, he wished particularly to call attention to the intrabuccal, which offers many advantages.

The operation for removal of the lower maxilla was usually accomplished at two or more sittings, but in his list he included as one all which were merely continuations of the same.

Dr. Hutchinson, of Brooklyn, said in malignant tumors he should consider the intrabuccal operation as an unsafe one—there would not be the same certainty of complete removal; but for phosphor-necrosis he considered it perfectly feasible and easy. It was also applicable to removals of the superior maxilla.

Dr. Hyde said the incision must depend largely on the requirements of the case. He had usually removed sequestrum from the inside.

Dr. Gouley, in reply to a question by Mr. Lister, stated that the bone was entirely dead, and should have been removed two years earlier.

Prof. Lister thought the incision should be determined by the tumor. He certainly would not employ the intrabuccal one in malignant cases, but might in innocent ones; although even here in males the scar could be well concealed, and even in females was not serious if made behind the ramus.

CAUSES, ETC., OF CALCULUS.

The paper of Dr. Claudius H. Mastin, of Mobile, Reporter, on "Causes and Geographical Distribution of Calculous Disease," was read but not discussed, owing to the lateness of the hour.

In summing up the *probable* causes of calculous affections, he considered: Hereditary influences, digestive trouble, sedentary life, indulgence in stimulating food, climatic changes, deficiency of clothing for proper protection of the body, an arrest of the healthy function of the dermoid tissue, want of harmony between the secreting and excreting organs, catarrhal affections of the uropoëtic viscera, injuries of the spinal cord, foreign bodies in the bladder producing cystitis, and the geographical distribution of calculous affections in North America.

SUBCUTANEOUS DIVISION OF THE NECK OF THE FEMUR.

Mr. William Adams, President of the Medical Society of London, then read a paper on this subject.

In it he had collected all the published cases in which this had been performed—twenty-three in number (five by himself)—and from the good results already attained, he should be prompted to do it in well-selected cases when the deformity is inconvenient, as there had been but one death, and that in an unfavorable case. He spoke of the malpositions in which anchylosis might occur, and showed the necessity of careful watching during the treatment of all hip diseases or injuries. The straight position in one case prevented the patient sitting on a chair, and also debarred her from emptying the rectum save while standing. Other serious malpositions were referred to. Numerous photographs were exhibited in illustration. The operation is very simple, the soft tissues being pierced down to the bone, the periosteum divided or scraped away, and the saw carried down along the blade of the knife, it being carefully noted that in sawing, the cut should be made at right angles with the longitudinal axis of the neck. The saw is blunt-pointed, very robust in the handle, and with cutting edge just as long as the diameter of the bone, that no damage be done to surrounding tissue. About two or three minutes usually severs the bone. When the head and neck have disappeared, the section may be made through the trochanter minor. Extension is applied by weight and pulley, and passive motion instituted at the end of first week.

His conclusions were: 1. That bones can be divided subcutaneously, the same as tendons. The operation is a well-established one, and the cases almost uniformly do well. 2. Long bones can be divided subcutaneously at any point with little risk. 3. In a large number of cases the operation is followed by but little irritation, and there is seldom pain or suppuration. 4. In some there is slight suppuration, but not serious, and in one case there was death from pyæmia. 5. The operation usually corrects the deformity, though anchylosis in the more favorable position may occur. In some cases motion has remained for a time, and in one case as long as three years.

Friday, September 8th.—Dr. A. C. Post related a fatal case in which gangrene set in; found subsequently to be due to the femoral artery and vein being hooked on the stub end of the bone. Subcutaneous division of the neck within the capsule would avoid this and other dangers.

Dr. Quimby, of New Jersey, asked Mr. Adams whether any classification had been made by him as to the causes of anchylosis.

Mr. Adams replied that about half were the results of coxalgia, the other half pyæmic, rheumatic, or traumatic. He always avoided scrofulous cases if possible, as they often did poorly.

Dr. Servais, of Belgium, advocated fracture of the bone by brute force, under the view that the weakened point was just below the trochanter minor, and it would first give way at this position, the point selected by Mr. Adams in cases where the head and neck had been destroyed. The advantage claimed was, that only simple fracture remained to be treated.

Mr. Adams replied that though he had several times broken femurs accidentally, he feared direct force would not be reliable as to the exact position.

Dr. McGuigin, of Iowa, claimed to have successfully performed subcutaneous section of the neck of the femur with the chain-saw, twenty years ago.

Prof. Joseph Pancoast, of Philadelphia, stated that Dr. Rhea Barton did not remove a triangular piece, as reported; he simply sawed through the bone.

Prof. Sayre spoke of two cases he had already reported, and said he was decidedly in favor of Mr. Adams' plan, and should hereafter adopt it when feasible, as it was far more simple. He suggested that extension be made after the operation at once—not waiting, as Mr. Adams had said, for three or four days. Mr. Adams' report confirmed his previous suspicions that anchylosis was likely to occur subsequently, though Dr. Post had a case in which good motion was secured. He then raised the question of the extensibility of muscles, but did not think this should prevent immediate extension.

Dr. Richardson, of New Orleans, related a case in which he accidentally broke the neck of the humerus in attempting to reduce an old luxation. He placed the broken end in the axilla, and secured a good movable joint.

Dr. Moore, of Rochester, called attention to the experiments of Bly, of that city, on muscles of animals, who had found them capable of slight extension.

Mr. Adams said it had been his intention in the future to apply extension immediately, and to enforce passive motion under chloroform every week.

Prof. Pancoast favored the subcutaneous boring and fracture of the bone.

Prof. Lister said in two cases after exsection of the neck of the femur he had applied too great extension, and prevented union.

WOUNDS OF THE ABDOMEN.

Prof. L. A. Dugas, of Georgia, then read a paper on "Penetrating Wounds of the Abdomen."

He said that penetrating wounds have hitherto been considered very fatal, and peritonitis assigned as the cause, and all treatment directed to it. Fatal termination usually takes place in twenty-four to forty-eight or sixty hours at most, but no process of inflammation with which we are acquainted proves fatal in that short time. He thinks fatal result is due to septicæmia, and not to inflammation, and treatment should be directed to prevent that, by laying open the abdomen, cleaning surfaces, stitching wounds of intestines, if any, ligating vessels, etc. By laying open abdomen early, we can examine and detect lesions of intestines or vessels; the wound cleansed can thus be reduced to its simplest expression.

Dr. Moore, of Rochester, said death not unfrequently occurred in twenty-four hours, with unmistakable evidences of peritonitis.

Dr. Campbell, of Georgia, heartily agreed with the writer's conclusions, and believed it would be much better in cases of concealed hemorrhage to lay open the abdomen, search for the bleeding vessel, wipe out blood clots, and close tightly.

Prof. Lister remarked that the experience of ovariotomists proves that even a cut at the linea alba is devoid of danger.

Dr. Post said that the paper was an excellent one, but he did not think it safe for the Section to adopt the conclusions without more discussion than the limited time permitted. It was therefore referred to the Publication Committee.

OPENING THE SAC IN HERNIOTOMY.

Dr. Fred. Hyde, of Cortland Village, N. Y., read a paper on this subject.

After giving a résumé of the usual methods of herniotomy, he said division of the sac is often necessary. Experience in Petit's, or the minor operation, proves that the cases which are most successful are those which furnish most favorable results with division of the sac. He said the objection that it exposes to peritonitis is refuted in the greater danger of returning the contents of the sac, with their average morbid state, into the abdomen. The objection that opening the sac exposes to air, light, temperature, etc., is no weightier than in ovariotomy and other abdominal operations. Other reasons were cited by the writer as to its safety, etc.

Prof. Joseph Pancoast remarked that the procedure, though undoubtedly proper in many cases, is very frequently unnecessary. In several cases of old large herniæ he had divided the strictures by a simple subcutaneous incision of the constricting point.

Dr. Post said the views of the essayist, if followed out to analogous conclusions, would tend to prove that Cæsarian section was preferable to a normal delivery. In some cases the sac should undoubtedly be opened, but in others there was no more reason for doing this than in refusing to attempt taxis for fear of some already existing lesion of the bowel.

ANÆSTHESIA.

Dr. Addinell Hewson, of Philadelphia, read a paper on "Anæsthesia, as produced by Nitrous Oxide and Rapid Breathing."

He stated the method had been suggested to him by W. G. Bonwill, a dentist of Philadelphia, and he had tried it in a number of cases, in public and private practice, with varying but satisfactory results. The method pursued was to cause the patient to breathe from forty to fifty times in the minute, the effect of which in from three to five minutes was a tingling of the surface, with flush face. Consciousness remained unimpaired, and the patient would perform any act desired, but was rendered totally devoid of sensibility. This method would be advantageous for short minor operations, especially those about the nose, throat, etc. The process occupied a longer time in young people and in cold weather. He explained the theory of its action by the retention in the blood of carbonic acid.

Owing to the closing of the Congress, this paper was referred to the Publication Committee, without discussion, as were also the two essays of Dr. H. F. Campbell, of Georgia, on "Urinary Calculi: Their Etiology Explained by the Neurodynamic Theory," and "The Ligation of Arteries for the Arrest of Inflammation and Prevention of Gangrene," and also Dr. E. M. Moore's paper on "Fracture of the Clavicle."

(*To be continued in our next.*)

Bordeaux Medical Prizes.—The Medical and Surgical Society of Bordeaux offers a prize of 1,000 francs, to be awarded at the end of 1879, for an essay on "The microscopical study of the human blood, fresh and dry, in the fœtus and in the adult, compared with that of other mammalia, in a medico-legal point of view." The essays are to be written in French or in Latin, and sent to M. Donaud, Secretary of the Society, before August 31, 1879.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from Sept. 10th to Sept. 16th, 1876.

FORWOOD, W. H., Surgeon. Relieved from duty in Dept. of Texas, and to report by letter to the Surgeon General when able to resume duty. S. O. 188, A. G. O., Sept. 11, '76.

JAQUETT, G. P., Asst. Surgeon. At expiration of his present leave of absence to report in person to the Comd'g General Dept. of the South for assignment. S. O. 188, C. S., A. G. O.

BROWN, J. M., Asst. Surgeon. Relieved from duty in Div. of the Atlantic, and to report in person to the Comd'g General Dept. of the Missouri for assignment. S. O. 188, C. S., A. G. O.

TAYLOR, M. K., Asst. Surgeon. Ordered before the Army Medical Board, New York City, for examination, for promotion, and on completion thereof, to rejoin his proper station. S. O. 188, C. S., A. G. O.

O'REILLY, R. M, Asst. Surgeon. Granted leave of absence for twenty days. S. O. 182, Div. of the Atlantic, Sept. 13, '76.

APPEL, D. M., Asst. Surgeon. When relieved by Asst. Surgeon Perley at Fort Monroe, to report in person to the Comd'g General Dept. of the Missouri for assignment. S. O. 188, C. S., A. G. O.

CUNINGHAM, Thos. A., Asst. Surgeon. Assigned to duty at Fort Rice, D. T. S. O. 112, Dept. of Dakota, Sept. 12, '76.

PERLEY, H. O., Asst. Surgeon. (Recently appointed.) To report in person to the Comd'g officer, Fort Monroe, Va., for temporary duty at that post. S. O. 188, C. S., A. G. O.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending September 16, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Sept. 9.....	2	19	8	3	2	22	1
Sept. 16.....	0	25	12	2	2	31	0

Two cases of yellow fever occurred, both from Savannah.

LAW FOR POISONS.—A new law is about to be made in England relating to the sale of poisons.

MEDICINE UNDER ROYAL PATRONAGE.—The King of the Belgians has placed a palace at the disposal of the Academy of Medicine in Brussels.

PAVILION HOSPITAL IN PARIS.—A new hospital on the plan of isolated pavilions, to contain three hundred beds, is being built in Paris.

HYDROPHOBIA.—Two deaths from this disease have been reported in Scotland. In one case the period of incubation was fifteen days, in the other two months.

OBESITY TREATED BY SEA-WATER.—A writer in the *Paris Médicale* recommends the treatment of obesity by the administration of sea-water, and the consequent residence by the seaside. The dose prescribed is a small glassful three times a day in a little fresh water or milk. Sea-baths are also recommended. We should think that the drinking and bathing might be advantageously combined to save time. In that way the dose, especially in surf-bathing, could be taken "plain," although the quantity could not, for obvious reasons, be regulated with exactness.

HOW TO MAKE LEECHES BITE.—A Mr. James P. Myles, of Parsonstown (*Dub. Med. Press and Circ.*), has always made leeches bite by placing them in an apple properly hollowed out, and applying them over the part.

PLUCKING LIVE POULTRY.—The English Society for the Prevention of Cruelty to Animals has announced the intention of prosecuting all persons detected in plucking the feathers from live poultry.

SWIMMER'S CRAMP.—The loss of body heat in water is now held to be intimately associated with the cramp which so often seizes even able swimmers. Here there is not only a general powerlessness induced, but the spasm of the muscles connected with respiration diminishes the capacity of the thorax, and the cramp-stricken swimmer often disappears immediately without warning, never to appear alive. The buoyancy conferred by the chest being full of air, is largely reduced by this diminished thoracic space, and the body at once goes under water. No skill in the art of swimming will secure any one from this risk, and when the water is cool it is well that the swimmers keep near shore, or at least near each other, so that aid can be readily rendered if required.—*Sanitary Record.*

A SIMPLE DISINFECTING APPARATUS.—Mr. Charles Gander, an English sanitary inspector, thus describes a simple disinfecting apparatus which he has devised: "I have the sulphur melted in an iron pot over the fire in an outhouse, and have some tin moulds prepared about three inches in diameter, and two inches deep. Place a ball of deal shavings as large as an egg in the mould, and pour about one pound of the sulphur over it. When cold or set take them out of the mould. These balls are then ready to be burned in appropriate vessels at a moment's notice."

BRITISH ARMY MEDICAL SERVICE.—At the recent examination there were fifty-four candidates for seventy-seven vacancies. Fifty passed the examination. What a good chance the remaining four would have had if they had been even decently prepared.

THE FIRST ANNUAL MEETING OF THE AMERICAN GYNECOLOGICAL SOCIETY was held at the New York Academy of Medicine, Sept. 13th, 14th, and 15th, 1876.

At the close of the morning session on Tuesday, the members and invited guests repaired to the residence of Dr. E. R. Peaslee, where a sumptuous lunch was served.

On Wednesday evening the President, Dr. Fordyce Barker, gave a reception at his residence, 85 Madison Avenue, where a most agreeable hour of social entertainment was spent.

On Thursday the members and invited guests partook of a munificent collation at the residence of Dr. T. Gaillard Thomas, and on Friday a bounteous repast was provided at the residence of Dr. T. Addis Emmet. How the doctors *discussed* things at those gatherings!

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, September 30, 1876.

SPECIALISM AND GENERAL PRACTICE.

It is so seldom that any writer takes the pains to plead the claims of the general practitioner against those of the now so fashionable specialist, that Dr. M. H. Henry deserves the thanks, not only of the audience which listened to his alumni oration,* but of the unseen multitude of his professional brethren which is reached through the pages of the press. His bold attack on the abuses in medical education and medical practice will meet a responsive sentiment in the heart of every honest and conscientious worker in our ranks. Although the view taken, that no man can be a specialist "until he has won distinction by ripe clinical observation, a good knowledge of pathology, histology, and microscopy," is not by any means an original one, it is, nevertheless, so well enforced in his remarks on the occasion alluded to, that it leaves little else to be said.

It is now so much the fashion to manufacture specialists to order that it is time that some manly attempts were made in the direction of reform. We have on former occasions repeatedly alluded to the evils connected with such a pernicious system, and are glad of another opportunity of bringing it to the serious consideration of our readers.

Specialism, in the mind of the medical student, is always associated with pecuniary success. Naturally he is inclined to tack his capabilities to some particular organ of the body as soon as he possibly can. Consequently when he graduates in medicine he commences the special study at once. In order, however, that there may be some tangible reason why he should be entitled to take his new departure, why he should seem to have more than the usual opportunities for fitting himself for his specialty, he seizes the convenient pretext of "brushing up" abroad, and being an attaché to some foreign clinic. In the course of a few months, during which an occasional article from his pen appears in the medical journals, he comes home ladened with all the glittering armory of his assumed rank. Next, if he have friends, he is appointed as summer lecturer to some of the medical colleges, and at once appears as an authority in his chosen branch; is careful to speak in "open meeting" at every opportunity, and advertise himself as a specialist on the slightest provocation. No discussion bearing even remotely on his branch is considered complete without his opinion or his suggestion, and it becomes generally known that he must carry his pack wherever he goes. These are what may be called pseudo-specialists, and we are sorry to say that they are becoming quite numerous.

For pure specialism—that is, the study of a class of diseases as a natural outgrowth of general practice—we have the highest respect. Such special studies are more the result of accident than of preconceived notions or of pecuniary expediency, and are always attended with brilliant results. A medical man who becomes thoroughly grounded in the general practice of medicine, with a natural leaning to a particular branch, becomes a specialist almost imperceptibly to himself. It becomes a natural outgrowth of opportunities, tastes, and circumstances, and gives himself the broadest possible foundation for a reputation.

Dr. Henry very truly says that the greatest specialists have always been the best general practitioners. Such specialists are so far from being one-idea men that they are capable of concentrating a cultivated knowledge of the general diseases upon a favorite branch, grafting, so to speak, their favorite study upon a full grown and thrifty tree. This is legitimate specialism, which will always thrive in spite of itself, and will always bear good fruit. To this method of studying special diseases, by men specially adapted to it, general medicine owes its present advanced stride towards an exact science and its wonderful achievements in curative measures. But alas! how few of such specialists we have among us, compared with what we might have if the circumstances attending the manufacture of the fashionable "ologist" were different.

The necessity for a general knowledge in medicine in the successful pursuit is well illustrated by Dr. Henry. One of the striking examples which he relates is the following:

"Again, a gentleman, who had been for a long time under the care of a great experimental physiologist (who devoted himself to nervous diseases), asked me to give him a letter of introduction to an oculist. He mentioned that his physician was treating him for softening of the brain—he was then absent from the city—and, as his vision was becoming impaired, he desired to consult an oculist. I gave him a letter of introduction to an ophthalmologist of deservedly great repute—one who is highly cultivated in the general science and art of medicine, and its literature.

* Specialists and Specialities in Medicine. An Address before the Alumni Association, University of Vermont, June 27, 1876, by M. H. Henry, M.A., M.D.

An examination with the ophthalmoscope displayed beyond any doubt that the so-called softening of the brain was—Bright's disease in an advanced stage. The attention of the pure 'nerve doctor' was subsequently called to the case, and he gracefully admitted his error. Now, was such an error of diagnosis pardonable in one who claims a very exalted position, and who charges correspondingly large fees for his valuable services! A few years judiciously spent in the practice of general medicine would enable any one of average intelligence to differentiate between a case of softening of the brain and Bright's disease."

The difference between the natural and manufactured specialist is no less striking in connection with success in practice. With the former, success, far from being a consequence of special practice, is a cause for it, while with the other the rule is a hard and desperate struggle for notoriety and money. As a consequence of this latter, cliquism is engendered, and every means taken by his friends to hold up the hands of their weaker brethren. This cliquism has, in many cases, so completely encircled itself around the faculties of our colleges, that no one not in the ring can hope for patronage or recommendation. If a would-be specialist is fortunate enough to get a position as lecturer, or better still as professor, it becomes a matter of principle with all connected with the school to help him. These men succeed after a while, but it is not because they are well-qualified specialists.

Previous general training has no small advantage in the development of taste for given special studies. There is often danger that a young man may choose the wrong specialty, and bring himself to grief by the necessity to atone for his precipitancy. We have known of some who have started out to be ophthalmologists and ended in being lithotomists; some who have commenced as laryngologists and ended as dermatologists; some who have begun as physiologists and ended as obstetricians; while others have tried every specialty, and in the end make the best general practitioners. Dr. Henry has done a good service to his brethren in exposing the abuses connected with the practice of medicine, and especially with pseudo-specialism and its attendant professional quackery. Referring to some of these, he says:

"I think that I may fairly claim that the wane of public confidence in the regular practitioner—a fact beyond doubt or dispute—may justly be attributed to the subdivision of labor, and the want of unity and harmony in practice. Experience has forced me to believe that the evils of this subdivision are individually nursed and fostered through lack of proper general qualifications, indolence, and the greater prospect of large fees. Diseases that were skilfully and successfully treated, in the early part of this century, by the general practitioner, are now sent from one 'ologist' to another, until the sufferer, exhausted of patience and means, seeks, in utter despair, the assistance of the nearest quack. It is useless to deny the success attending, at times, the efforts of these impostors. Many of them are wise in the ways and *personnel* of the world. They listen attentively to the course of treatment that has been pursued, and they discover previous excessive and meddlesome interference as the cause of the failures. May not some of the successes claimed by the followers of the mock science of homœopathy (in cases that have previously been under the care of so-called better educated practitioners) be attributed to this cause, and a nice appreciation of what *not* to do under certain circumstances?"

OUR REPORT OF THE INTERNATIONAL MEDICAL CONGRESS.

We have devoted a considerable amount of space in the present and two preceding numbers to a report of the International Medical Congress. It is to be hoped that our estimate of its value to our readers is commensurate with the time and labor which have been expended upon it in regard to detail and accuracy. The abstracts of the papers have been made with the greatest care, and the discussions have been elaborated to the utmost extent of allowable space. The great variety of the subjects treated, and reputation of the authors, give to the reports a value which is quite unique. We venture to say that never before in the medical history of this country has a more distinguished number of physicians and surgeons been assembled to treat upon topics in which they were so directly interested, and in which they are considered to be experts. While we take occasion to thank all those gentlemen who have so kindly aided us in the making of our report, we cannot refrain from again referring to the stupid resolution of the Congress which might have prevented any part of the proceedings from appearing for a long time to come. Our course in presenting this report, despite the resolution of the Congress, is in vindication of what we consider to be the right of any medical journal to give the proceedings of any public medical meeting it chooses, without restriction.

Unhealthy Homes.—A writer in the *Christian Union* details some interesting personal experiences referring to bad drainage in three houses, which were in turn occupied by his family. In the first a drain communicating with a cesspool, ran directly under the furnace, the foul gases by means of the latter finding their way into every room. In the second there was practically no drain at all; the rooms were constantly damp, and the level of the well was not unfrequently above that of the cellar bottom. In a third, on certain occasions, the well, cistern, and cesspool were indirectly and yet very effectively made to communicate with each other. But after all, this is the old story.

Reports of Societies.

INTERNATIONAL MEDICAL CONGRESS.

SECTION OF OBSTETRICS.

Monday, September 4th, 1876.—Dr. Robert Barnes, of London, chairman, was introduced by Prof. Wm. Goodell. He paid a graceful tribute to the American medical profession, and to American gynæcologists, who had done so much towards making obstetrics an exact science.

NON-PUERPERAL HEMORRHAGES.

A paper on "The Causes and Treatment of Non-puerperal Hemorrhages of the Womb" was read by Prof. Wm. H. Byford, of Chicago, Reporter, ordered to be published, and a vote of thanks tendered the author.

He described the uterus as naturally a hemorrhagic organ; the menstrual changes depending on the ovarian reflex nervous influence exerted unremittingly through the genito-spinal centre. These changes consist of hypertrophy at the commencement of the menstrual flow, denudation of the mucous membrane, and the involutions of that period. He referred at length to the various constitutional and local causes producing disturbances of harmony and profuse flow as a result, and afterwards described the treatment, which is curative, removing the pathological conditions; palliative, such as will stay the bleeding until radical treatment can have its effect.

Prof. Goodell called attention to the inertness, in these cases, of pure astringents, with one exception, when administered by the mouth. He thought the chief good from the use of acetate of lead was through the opium that generally accompanied it. The exception is gallic acid, which he had found very effective (grs. xx.–xxx. every hour). He had given as much as half an ounce through the day (in treacle or jelly). In a few cases ergot increased the bleeding in some unaccountable way, but in most instances it proved valuable, especially hypodermically. Free dilatation of the cervix is often sufficient to check bleeding; after removing the sponge-tent he applies chemically pure nitric acid by a swab to the whole interior surface of the womb, with excellent results. He endorsed Prof. Byford's recommendation of bichloride of mercury in the general treatment, and thought the result was not wholly due to its alterative effect, but largely to its power, in small doses, of increasing the number of red corpuscles, thus correcting the anæmia generally present. During hemorrhage he applies heat to the dorso-lumbar region, and gives internally cinnamon tea, or cinnamon boiled in milk, on purely empirical grounds.

Dr. J. W. Rosebrugh, of Hamilton, Canada, thought Professor Goodell had failed with the acetate because his doses were too small. Dr. Workman, of Toronto, gives it in post-partum hemorrhage in doses of a half to two drachms, and claims that he can relieve any such case by two or three doses. It is a valuable remedy in an emergency.

Dr. Edward M. Hodder, of Toronto, thought the discussion should be restricted to non-puerperal hemorrhages. He uses internally tr. cinnamon. acid. sulphuric, and tr. cimicifuga, with local applications of dilute Monsel's solution by means of a glass tube directly to the uterine interior.

Prof. Alex. R. Simpson, of Edinburgh, considered the uterus as "uncertain, coy, and hard to treat;" no treatment would suit all cases. Oxide of zinc he had found to materially reduce the menorrhagia (gr. i. thrice daily, or gr. ss. oftener). The latter may return from force of habit after the uterus is restored to a healthy condition, especially in hyperæmic cases. He has no great faith in the vaginal tampon as a direct preventive of uterine hemorrhage, but it is sometimes beneficial by the impression and confidence it gives the patient. The sponge-tent is preferred generally, as it opens the way for subsequent exploration and treatment. Nitric acid may be applied in the intervals, but in actual hemorrhage he prefers the perchloride or persulphate of iron. In obscure cases and where the mucous membrane is granular, Prof. James Y. Simpson's plan of scraping off the mucous membrane with a curette proves effective; he had seen cases cured by it without astringents.

Dr. Thos. W. Gordon, of Ohio, recommended bringing up the system and full doses of quinia.

Dr. H. F. Campbell, of Georgia, had noticed a periodical character in the bleeding in malarial regions, and uses full doses of quinia. The uterus being engorged from malposition, he insists upon its nightly self-replacement by the patient as indispensable. He uses large cold-water injections between the menstrual periods, with good results.

Dr. Thos. F. Rochester, of Buffalo, thought quinia had an ectrotic influence apart from its anti-periodic power, being valuable in regions non-malarial.

Dr. B. F. Sherman, of New York, recommended Sims's styptic cotton for a tampon, and in granulations a saturated solution of permanganate of pota-sa. In obscure cases he gives internally oxide of zinc with opium (gr. i. to gr. ½).

Dr. Chas. Shepard, of Michigan, had checked hemorrhage by injecting ice-water through a female catheter into an india-rubber bag or condom, which, having been previously carried up through the cervix, applied itself closely to the uterine interior.

Dr. Rosebrugh thought gallic acid the only reliable astringent internally. Locally, Monsel's solution is applied *guttatim*, through a glass tube converted into a syringe, by placing a rubber ball at its end.

Dr. Robt. Burns, of Philadelphia, gives tonics, and applies locally a solution of a drachm each of tannic acid and sulphate of zinc in an ounce of glycerine, with excellent results.

Prof. Theoph. Parvin referred with commendation to Trousseau's plan of injecting quantities of hot water, and applying heat to the spine. Hemorrhage, generally accompanying endometritis, can be relieved by scraping or pinching off portions of mucous membrane with forceps, and applying Churchill's tr. of iodine.

The Chairman referred to the mutual advantages of meetings of this kind, where men met to express and compare their views of disease and methods of treatment, and profit by each other's experience. To review remedies and expedients recommended, he would say, first, that quinine was very valuable in the treatment of metrorrhagia, especially with sub-involution. He had noticed the law of habit mentioned by Prof. Simpson, in hemorrhages where the uterus was healthy, occurring independently of ovulation and often post-climacteric. They were to be attributed largely to regional attraction of blood to the uterus. Attention must be paid to the constitutional state, especially where no local lesion can be detected. Topically, the most efficacious plan is to dilate the cervix and inject astringents. Gallic acid had succeeded in his hands given by the mouth; but remedies not strictly astrin-

gents are useful, such as digitalis, reducing the heart's action and sometimes checking the bleeding. He had also good results from witch-hazel. The curette treatment should not be adopted in malignant disease, as it may be followed by furious bleeding. It should be handled with great care.

Prof. Byford said that in the vast majority of cases, hemorrhage from a non-pregnant uterus is due to one of two conditions: 1. Hyperemia. The treatment should aim at condensation of uterine structures; here quinia is second only to ergot. Sponge-tent also induces condensation by pressure. 2. Vitiated state of mucous membrane from inflammation or growths, this structure giving way more readily under the menstrual molimen and bleeding more freely; topical applications are indispensable. He had also noticed a periodic character in metrorrhagia in malarial districts. Where bleeding occurs after menopause from determination of blood to the womb, better results had been obtained by him from large doses of quinia and iron than from ergot. The tampon when used should not simply be placed against the os, but packed in front and behind to compress the cervix; he had never witnessed any bad results from its use.

LABOR IN NARROW PELVES.

Tuesday, September 5th.—Dr. Barnes in the chair. Prof. Wm. Goodell, Reporter, read his paper on "The Mechanism of Natural *v.* Artificial Labor in Narrow Pelves."

After defining a narrow pelvis, and describing the more common kinds of pelvic deformity, the following topics, regarding alone the mechanism of labor, were introduced for discussion by Dr. Goodell: The mode in which the head enters and passes the brim in the flat pelvis; and also in the generally contracted pelvis, the commonly accepted doctrine of the initial flexion of the head being contested; the manner in which the after-coming head behaves in the flat pelvis; and also in the generally contracted pelvis; the effect instrumental interference has on the mechanism of labor in such pelves; the inquiry whether turning has any mechanical advantages over the use of the forceps; with the following general conclusions deduced from a consideration of these questions, the scope of the paper being strictly limited to the mechanism of labor in narrow pelves:

1st. The unaided first-coming head and aided after-coming head observe in a flat pelvis precisely the same general laws of engagement and of descent. Hence, version here means art *plus* nature.

2d. The forceps, however applied in a flat pelvis, antagonizes more or less with the natural mechanism of labor. Hence, the forceps here means art *versus* nature.

3d. The aided and unaided first-coming head observe in a uniformly narrowed pelvis precisely the same laws of engagement and of descent. Version violates these laws. Hence, the forceps here means art *plus* nature; version, art *versus* nature.

4th. At or above the brim of a flat pelvis, fronto-mastoid or even fronto-occipital application of forceps interferes less with the moulding of the head, and violates natural mechanism of labor less than biparietal application.

5th. In flat pelvis, the vectis aids natural mechanism of labor, and therefore meets applications better than the forceps.

The Chairman pronounced this to be the most able summary of the matter yet heard by him. The passage of the fœtus through the pelvis, and the obstructions to its progress from deformities, were not only to be studied from experience, but, as the conditions are mechanical, by *à priori* reasoning, though experience must be the test.

Prof. Byford had heretofore recommended the use of the vectis in the fore- or after-coming head when above the brim, and applying the forceps in the canal; but, after hearing this able paper, will be inclined to turn in kidney-shaped pelves, instead of delivering directly.

Prof. Wm. T. Lusk, of New York, does not believe, as stated in the paper, that the forceps tend to produce extension of the head, but that they will bring it down just as they find it at the pelvic brim. He applies the forceps, pulls the head beyond the constriction, then takes them off, allows the patient to come out of the anæsthesia, and reapplies them in the canal. The danger of applying them above the brim is exaggerated, but it would be wrong to pull the head directly down without reapplying them.

Prof. Goodell, in reply to a question from Dr. Squire, of Elmira, whether his remarks applied also to the forceps of Chassaignac, said he had no experience in their use. It was significant that the French are tending in this direction of mechanical aids to delivery by bands, straps, and pulleys, borrowing expedients from the veterinary surgeon. In France, turning is so rarely performed as to be almost unknown. Drs. Blot and Pajot, of Paris, who practice turning in emergencies, are the only ones, as far as he knows, who oppose the use of these agents in their practice.

Prof. Simpson said that the flat pelvis presents peculiar advantages for version being performed here with the best hope of success, and theoretically the best result would be anticipated from bringing the base of the skull to the pelvic brim. He thought the amount of force applied to deliver the head after version might endanger the neck of the fœtus, and cited Boudin's experiments on the comparative force required in using forceps and by dragging after turning, the forceps being deemed better in uniformly contracted pelves from their compression of the frontal bones. He had himself found it impossible to apply forceps to the sides of the head when above the brim. They can be applied to the occiput and sinciput, and when the head comes into the canal, removed and applied to the sides.

The Chairman had practised version instead of the forceps where contraction was at all marked. In minor degrees of contraction, forceps aid in elongating the head and assist delivery. The frequency of occipito-posterior positions in contracted pelves enforces Dr. Goodell's arguments. He cited a case of difficulty at the brim, attended by him in five successive labors, the position in all being occipito-posterior. Another case had some contraction; the first child was delivered by forceps dead; in the succeeding two labors, version being resorted to, the children were born alive.

The vectis might be used in minor degrees of contraction where forceps would do as well or nearly as well, but between the forceps and version the vectis does not come in. In version the great danger to the child is in the amount of traction employed. This risk may be reduced by pulling in the line of axis of the superior strait, so that the head may rotate around the projecting promontory as a centre, and by having an assistant push the head backwards with his hand in the hypogastric region. He has seen a child's head pulled off by injudicious traction. Pull the body downwards and backwards until the head has rotated around the promontory, when the forceps may be applied and delivery completed in the line of Carus's

curve. The use of forceps in the fore-coming head is not based on sound mechanical principles in contracted pelves, except in minor degrees of deformity. When ordinary delivery is impossible, with no hope of saving the child, perforation of the head and escape of a few ounces of brain matter allows the skull to collapse, and delivery is comparatively easy.

Prof. Goodell said that he had been staggered by Boudin's experiments until he found the error in them. A pelvis was used with a movable promontory made to project by a screw. The pelvis itself was not a normal one, and every turn of the screw converted it more and more into a uniformly contracted pelvis, and not into the flat pelvis. Again the traction was straight; being made of pulleys attached to the wall, it allowed of no rotation. In kidney-shaped pelvis the promontory is rounded; in these experiments it was sharp. In reply to Prof. Lusk, he said the forceps were of advantage in many cases not mentioned, but he had confined himself to the conditions named in the paper.

RELATIONS OF CONVULSIONS TO HIGH TEMPERATURE.

A paper was read "On the Management of Convulsions in Children, depending upon a High Temperature of the Body," by T. K. Holmes, M.D., of Chatham, Ontario, Canada.

The writer sketched the various causes of eclampsia in children, and believed that in many cases the convulsions are directly attributable to the effect of high temperature on the nervous system. The following propositions have been confirmed by experience: that extreme nervous susceptibility of children under ten years of age, predisposes them to convulsions; that bodily temperature of 103° (F.), and over, tends to produce them; that their severity bears a direct ratio to intensity of fever; that they are most apt to occur at the onset of the morbid attacks; and that whatever reduces temperature arrests or modifies the muscular spasms.

He referred to the indications for treatment in these cases, as suggested by the propositions just given, and stated that these can be accomplished more readily and safely by external than by internal medication—heat which exhausts the power of the heart, or remedies which weaken cardiac power, being generally inadmissible. The bath being a thoroughly efficient substitute, should be resorted to in such cases. Several cases treated by the author were mentioned to show that in simple pyrexia, without zymotic influence, convulsions were caused by heat and promptly controlled by the bath. Tepid water is at first used to prevent alarm or shock, gradually reduced by adding ice water to about 60°, and until the axillary temperature becomes nearly normal, the patient being then taken out and put in blankets. The temperature of the body is not to be reduced in the bath to below the standard of health. This treatment is also available in diseases attended by high temperature, without convulsions. Other indications require treatment in convulsions, as the bowels, etc.

The Chairman said the rise in temperature was due in these cases to nervous irritation or blood poison. It would be interesting to know whether blood poison or hot blood, acting on nerve-centres, produced convulsions; but with rise of temperature there is unquestionably increasing liability to eclampsia. In some cases convulsions occur without material elevation of temperature, as in uræmic convulsions after scarlatina. He thought that scarlatinal patients could be dipped into the cold bath. He had for a long time used sponging with acetic acid in such cases. The credit of introducing cold bathing in fevers belongs to Dr. Parry of Liverpool; it had been dropped and temporarily forgotten, when it was revived by the Germans.

Dr. Rochester, of Buffalo, said it was fashionable to attribute increased tissue change, etc., to excessive heat, but thought other meteorological influences might be at work. When the sky is clear and temperature very high, cholera infantum is not so prevalent as when the air is loaded with moisture and the sky cloudy, though the thermometer may be lower.

ENUCLEATION OF OVARIAN CYSTS.

Dr. Julius F. Miner, Buffalo, N. Y., by invitation read a paper on the "Enucleation of Ovarian Cysts."

He stated that the enucleation of ovarian cysts was advocated by him seven years ago. It has been well received, but he thought his operation was not fully understood. After stating the relations of the ovarian cysts to the peritoneum and vessels, and the facility with which the cyst-wall is cut open, the tumor readily rolling out, he said that the fear of hemorrhage was unfounded, as the vessels moving from the peritoneal coat are capillary, and oozing is readily checked. Bleeding is more likely where the clamp is used and vessels cut across. A dry napkin to the collapsed cyst-wall checks the oozing, larger trunks are closed by torsion or ligature, and the contracted membrane is restored to the abdomen, giving no further trouble. If the operation fails, the clamp, cautery, or ligature may be subsequently applied. The diseased portion is removed, the living part returned; there is no pedicle outside, no need for drainage. Manipulation is no more difficult than separation of cystic growths from cellular tissue elsewhere.

(The paper contains the notes of several successful cases of enucleation of simple and multilocular cysts.)

The Chairman said no rule could apply to all cases. In some, enucleation was the only operation; he had been accustomed to regard it as a *dernier ressort*. He does not hesitate to tie the pedicle with whipcord and return into the abdomen; he had seen no bad result from the ligature, but thought the clamp gives greatest security.

Dr. Jas. P. White, of Buffalo, said where the pedicle is large and flat we cannot enucleate satisfactorily; where there is bleeding the hot iron is useful to sear the stump; it leaves less in the abdomen for absorption, and pregnancy occurred in his practice as often after the operation as he had lost patients.

Dr. E. R. Peaslee, of New York, did not think the vessels of ovarian tumors are capillary, as in some polycysts serious bleeding ensued. He had lost one patient by hemorrhage after enucleation, a vessel deep in the pelvis being broken off that could not be secured. He saw no objection to applying ligatures. In small cysts there is no advantage in enucleation, but he would adopt it in cysts adherent to the liver. He generally cut the ligature close, and had only one case where the pedicle sloughed. With this exception he never in these cases lost a patient from the ligatures.

Dr. G. Kimball, of Lowell, had used enucleation once, but in other cases he regretted not doing so. He generally uses a clamp, but adapts the treatment to the case.

Prof. Simpson agreed with this last remark. Best results would probably flow from cases where the abdomen is closed, and nothing left in its interior to cause irritation or future trouble.

Prof. Theophilus Parvin had had two cases of enucleation; one complicated by pregnancy, had consid-

crable bleeding checked by flannels dipped in hot water and freely applied. There is less risk in clamping than in returning large raw surfaces into the abdomen. Enucleation was valuable, but was not the only plan of treatment.

Dr. Miner said he found the vessels running in sulci and avoids them in enucleating. Where there is bleeding he resorts to torsion, but enucleation did not interdict subsequent use of hot iron, ligature, or clamp.

Wednesday, September 6th.—Dr. Barnes presiding. Dr. W. L. Atlee, Reporter, read his paper on the

TREATMENT OF FIBROID TUMORS OF THE UTERUS.

The subject was treated mainly from the standpoint of personal experience. The paper inquired into two general subjects: I. Tumors usually accompanied with hemorrhage, embracing (*a*), fibroids occupying the vaginal canal; (*b*), fibroids within the cavity of the uterus; (*c*), interstitial submucous fibroids; (*d*), interstitial fibroids proper; (*e*), recurrent fibroids. II. Tumors usually not accompanied with hemorrhage, including (*a*), interstitial subperitoneal fibroids; (*b*), sessile peritoneal fibroids; (*c*), pedunculated peritoneal fibroid; (*d*), interstitial cervical fibroid; (*e*), myomatous degeneration of the uterus; (*f*), fibro-cysts of the uterus. He considered the best mode of treatment, both surgical and medicinal, as the removal of tumors *per vias naturales*, by abdominal section, the propriety of extirpating a fibroid uterus by either of these methods, and an inquiry into the several agents which are supposed to control the growth of fibroid tumors.

Dr. J. L. Atlee, of Lancaster, Pa., stated that, through an error of diagnosis, abdominal section had been performed in his practice in two cases of fibroids, followed by recovery. In one the tumor was sessile, springing from the fundus; hemorrhage took place on one side, under the cyst-wall, giving a sense of fluctuation, and forcing the tumor into a half-moon shape. The growth, weighing 12 lbs., was removed, and a clamp applied. In the other case there was ovarian cyst on right side and a sub-peritoneal uterine fibroid (6 lbs.) in the left; both pedicles were included in the same clamp. He thinks this operation will soon be considered as legitimate as ovariotomy.

Dr. Alex. Dunlap, of Ohio, had noticed sub-peritoneal fibroids stopped growing after attaining a certain size—sometimes even receded. He described the ingenious plan for drainage outside the peritoneal cavity already alluded to in the RECORD several weeks since. He reported two cases of abdominal section for uterine fibroma; both died from want of drainage.

Dr. Kimball, of Lowell, Mass., was pleased with the suggestion just made, and with the general propriety of letting these growths alone. He reported a case of abdominal section for supposed ovarian cyst, which proved to be fibroma. The organ was extirpated, and a silk ligature applied. He was sent for six months later to remove the ligature, but found it firm; eventually it slipped inside, and gave no further trouble. The woman has gained 60 lbs. since the operation. He would not operate where the entire organ was involved and encroaches on the vagina, from fear of hemorrhage or exhausting suppuration. Instead of ligating the stump, he prefers the écraseur, and sears the stump with the hot iron. Very few cases authorize extirpation of the uterus. He had not seen any result from muriate of ammonia or ergot in sub-peritoneal fibroids, but one case got entirely well after a year's treatment by iodide of potassium injections into the uterus, three times a week (grs. viij.–x. to ℥ i.).

Dr. Peaslee, in a case of uterine fibroma not attended by any symptoms, unqualifiedly recommends muriate of ammonia; where the tumor is interstitial, Squibbs' fluid extract of ergot (gtt. x.–xij., t. d.). In hemorrhage there is no better remedy than ergot and chloride of iron. In a variety of polypus growing from the posterior wall of the cervix, projecting into the canal, and perhaps into the vagina, there is always serious hemorrhage from the pedicle. In such cases he uses the ligature and antiseptic washes. In the Negro race multiple fibroids are so numerous that in a Home in New York he is informed they are invariably found in cases over forty years of age. In cases of doubt in diagnosis, rectal exploration is justifiable. He had restored a retroverted gravid womb, at the fourth month, by its aid. In the discussion fibro-cysts should be separated from fibroids proper; the former generally spring from the posterior wall of the uterus and drag the organ upward, elongate the organ and bend it forward; this does not occur in simple fibroma, and is a diagnostic point.

Dr. H. Lenox Hodge, of Philadelphia, said: The best means of treating hemorrhage from uterine fibroma is to lift up the uterus and keep it in good position with an appropriate pessary. This treatment, introduced by his father, is followed by lessened bleeding, and in some cases by disappearance of the tumor, without internal medication.

Dr. C. B. King, of Pennsylvania, reported one case of operation by abdominal section and the clamp, with recovery.

Dr. Chas. Shepard, of Michigan, lost a case by not operating, and saved a second case by abdominal section and the ligature.

Dr. Geo. Sutton, of Indiana, read notes of one sub-peritoneal and one submucous fibroid cured by ergot hypodermically, and had one fatal case.

Dr. E. H. Trenholme, of Montreal, reported two cases of successful laparotomy, one fibro-cystic and the other fibroid.

The Chairman said that all agree that this operation should not be resorted to unless life is in danger, but in an extremity we are bound to extend any hope of relief. He had lost three cases within a year by attempting to remove the tumor through the vagina, and is extremely shy of operating unless he can remove every particle of the growth. Septicæmia occurring, may be remedied by frequent antiseptic injections and administration of quinia by the mouth.

THE THREE IMPORTANT OBSTETRICAL INSTRUMENTS.

Three obstetrical instruments were exhibited by the Secretary, sent by Prof. Lazarewitch, of Kharkoff, Russia, with a folio containing photographs and descriptions of their application. They consisted of a pair of short forceps, fitting together in a peculiar way; a double blunt hook, with an eye in one extremity, by which a fillet could be passed; and a peculiar cephalotribe and tractor, which to the Chairman appeared, in principle, to be an old English instrument revived. A vote of thanks was returned to Prof. Lazarewitch.

Thursday, September 7th, 1876.—Prof. Simpson in the chair. Prof. Wm. T. Lusk, Reporter, read a paper on the

NATURE, CAUSES, AND PREVENTION OF PUERPERAL FEVER.

Looking on puerperal fever as a generic term, he examined into its different varieties, making a distinction between non-infectious and infectious forms.

The non-infectious form was the result of traumatic injuries, old peritoneal adhesions, disregard of hygienic precautions, and mental influences; the infectious form was a septic disease. Local lesions were the usual, though not the necessary point through which the poison entered the system. He then inquired into the relations of bacteria to puerperal fever, the influence of erysipelas, scarlatina, diphtheria, etc., upon the puerperal state; and atmospheric influences. In studying the causes, he made deductions from civil and hospital statistics and private practice, and gave rules for prevention based on our knowledge of causes.

Dr. H. P. Yeomans, of Canada, remarked that lactic acid in the circulation would cause endocarditis, with deposits of fibrin on the valves; in such cases it is not necessary to suppose the presence of bacteria.

Prof. Goodell thought statistics of death from puerperal fever were unreliable in private practice, as physicians disliked to give certificates for it, and often gave instead one of the phenomena, as pleurisy or pneumonia, as the cause. This is one reason why the death-rate in Maternities from this cause is relatively high. Of 1,021 patients treated at the Preston Retreat, there had been only three deaths from puerperal fever; not one case of pelvic abscess. He isolates the patients as much as possible. In incipient cases he gives enough morphia or opium to subdue the pain; quinia is a favorite remedy, and alcohol given largely as an antiseptic and antipyretic, and to sustain the heart, as there is tendency to fatty degeneration.

Dr. Thos. W. Gordon, of Ohio, in a large practice had seen only two cases of puerperal fever, but had seen many incipient cases arrested by ergot, quinia, and alcohol.

Prof. Byford said, cases of puerperal fever belonged to three principal classes: those arising from within the patient or her immediate surroundings; those occurring in the same neighborhood, endemic cases, the cause being zymotic, as in hospitals and poor neighborhoods. When this form prevails in hospital, with ordinary precautions he does not dread carrying the disease among his private patients. The third class of cases occurs under peculiar epidemic influences, as during prevalence of the Black Tongue in Indiana, in 1839, when in the first part of the epidemic all the puerperal cases died. There was no lack of ventilation or cleanliness; they were not communicated, as they occurred miles apart in the practice of different physicians, and in cases unattended by physicians. There must have been a wide-spread epidemic influence.

Dr. J. L. Atlee quoted three cases where puerperal fever was communicated from erysipelas.

Dr. Jas. P. White testified to the contagious nature of the disease, and its connection with erysipelas. No physician has a right to go from a case of erysipelas, or of puerperal fever, and attend a case of confinement.

Prof. Trenholme had five cases of puerperal fever, all of which recovered under careful treatment and large doses of morphia. Of six hundred cases of obstetrics, he had lost but one from any cause whatever.

Dr. Robt. Burns, of Philadelphia, recommended venesection in cases that would bear it, and internally, opium, gr. i., calomel, gr. ss., hourly, and a poultice to the abdomen.

The Chairman said, in all the works on the subject error creeps in when they discuss puerperal fever. The chapter on this subject should be entitled "Fevers of the Puerperal State," and extend from simple mastitis to those accompanied by poisoned blood. Many cases called puerperal fever were typhoid fever, occurring in the puerperal state, and more rapidly fatal on account of lessened power of resistance. Apart from fever caused by special poisons, which might suggest a division of cases into typhoid puerperal fever, scarlatinal puerperal fever, and those due to erysipelas, measles, etc., others closely resemble the fever following surgical operations. It would be interesting to inquire if soldiers wounded early in the fight, while fresh and vigorous, were less liable to surgical fever than others wounded in the same battle after hours of fatigue and exhaustion. An analogy exists here between such cases and the puerperal condition, so far as relates to dangers to which puerperal women are exposed from short and long labors.

We should study all the sources of this disease that we can find in our daily rounds. Most of the germ destroyers are acids,—carbolic, sulphurous, salicylic, etc. There is nothing better to disinfect the hands than common vinegar; after extraordinary exposure, the clothing should be exposed to sulphurous acid fumes.

Prof. Lusk stated, that masses of bacteria had been found on the cardiac valves in cases examined. He used Labarraque's solution to disinfect his hands, washing them to the elbows, perhaps twenty times a day during an epidemic. He had never carried the disease from hospital to private patients.

Dr. Fred. Semeleder then read a paper on

ELECTROLYSIS, ESPECIALLY FOR THE CURE OF OVARIAN CYST.

After some general remarks on electricity, he gave an account of the effects of electric currents on solutions of salt or albumen, stating that the positive and negative pole act somewhat differently, and that from this circumstance different indications may be derived. He then passed to the cure of ovarian tumors by electrolysis, and gave a short statement of six cases he had successfully treated. The method is really new, though cases were published in 1859; they were long forgotten; the profession took no notice of them. No inflammation, no pain, no adhesions were caused; his patients were never put under chloroform, nor confined to bed. The cures required from one to five months; the patient is not deprived of one of her most interesting organs. He concludes emphatically: It is a case of conscience to try electricity, before ovariotomy is resorted to, as a patient will not find herself in a worse condition for the operation if electrolysis prove unsuccessful, while a little delay is an insignificant evil in comparison to the risks of ovariotomy.

Friday, Sept. 8th.—Prof. Simpson in the chair. On motion, it was decided to have all the papers read *seriatim* before discussion.

Dr. Simon Fitch, of New York, read a paper on

"PARACENTESIS, ASPIRATION, AND TRANSFUSION."

It considered: 1. Paracentesis as it was, with the old trocar; 2. Paracentesis and aspiration as they are with modern instruments; 3. Paracentesis, aspiration, and transfusion, as they should be with available apparatus. The following conclusions were given: 1. The old trocar, with big head and split canula, should be esteemed a relic of the past. 2. Modern trocars chiefly used are, either the pointed single tube, too often used in aspiration without a guard to cover the point, which is very dangerous; or the same guarded by a canula on the outside, which if thick is uncertain to enter; if thin, is only somewhat less hazardous than the point itself. 3. The trocar of the future should

be easy of insertion, harmless when inserted, safe as a probe or sound, competent for the free passage of fluids, adapted to the aspirator, and certain to have a wound ready to heal. A series of instruments under the general name of dome-trocar was described by him, and its mode of application and advantages explained at some length.

It is said by Dr. Fitch to be adequate to make transfusion and other critical operations simpler, quicker, and safer, and so advance the efficiency and safety of paracentesis, aspiration, and transfusion of the future.

UTERINE HEMORRHAGE AND INVERSION.

Dr. E. H. Trenholme, of Montreal, then read a paper on "Uterine Hemorrhage," and Dr. James P. White, of Buffalo, one on "Chronic Inversion of the Uterus." Both were interesting and valuable contributions.

RETROVERSION OF THE GRAVID UTERUS.

Dr. T. F. Rochester, of Buffalo, reported a case of retroversion of the gravid uterus, between the fourth and fifth months. So completely was the organ capsized that it was impossible to find the os uteri. There was the usual hemorrhage from the bladder. It was found or judged impossible by position and manipulation to replace the womb. It was decided, on consultation with Prof. James P. White, to puncture or tap it, through the wall of the everted fundus, with a capillary trocar. This procedure was followed by the happiest results; in three days thereafter a fœtus nine inches long was expelled, and the mother recovered without an unfavorable symptom. Two months afterwards the womb was replaced with Simpson's sound and retained *in situ* by a hard rubber cradle-shaped pessary. The patient continues perfectly well, but has not since become pregnant.

Dr. John L. Atlee cautioned against puncturing every retroverted gravid uterus. He recalled a case retroverted by full bladder easily restored after catheterization and which went on to full term. He had seen only one case of inversion in fifty years. He was summoned in consultation in an acute case, but found her in a condition of collapse that forbade operation; after advising opium in full doses, he left. Much to his surprise he heard some time afterwards that the woman did not die, but was again pregnant. He did refer to this as spontaneous reduction, but not purely natural; as the womau was again pregnant, the *modus operandi* was left to individual speculation.

Dr. W. J. Heddens, of Missouri, has reduced two recent cases of inversion with the air-bag.

Dr. W. L. Atlee reduced in ten minutes an inverted uterus of several months' standing, with the blunt end of the large dome-trocar of Dr. Fitch. He reported two other cases of retroversion of the gravid uterus caused by distended bladder, both easily restored: one went to full term; the other, complicated by sphacelus of the bladder, miscarried.

A NEW CLAMP.

The Secretary exhibited a new clamp for ovariotomy, by Dr. Alex. Strubel, of Dresden, consisting of two sickle-shaped segments of steel drawn together by a screw, to secure the pedicle.

After passing a vote of thanks to Dr. Barnes and Prof. Simpson for their services in the chair, the Section adjourned *sine die*.

SECTION OF DERMATOLOGY AND SYPHILOLOGY.

Monday, Sept. 4th, 1876.—The Section was organized, Prof. Jas. C. White, of Harvard University, taking the chair, Dr. Arthur Van Harlingen, of Philadelphia, Secretary.

VARIATIONS IN SKIN DISEASES IN DIFFERENT COUNTRIES.

A paper on "Variations in Type and in Prevalence of Diseases of the Skin in Different Countries of equal Civilization" was read by James C. White, M.D., Professor of Dermatology in Harvard University, Reporter. This was based on statistics drawn from reports of leading dermatologists of Europe and America, embracing 50,000 cases from abroad, with 12,000 observed in this country.

As a result of examination and comparison of these statistics, he deduced certain conclusions embraced in a series of propositions, as follows:

1. Certain obscure affections, the etiology of which is little if at all understood, even in those parts of Europe to which they are mostly confined, may be regarded as practically non-existent among us. Of such are prurigo, pellagra, and lichen exudativus ruber.

2. Certain diseases directly connected with and dependent on poverty and habits of personal uncleanliness are less prevalent in the United States than in those parts of Europe of which we have sufficient statistical information for comparison. Examples of this class are the animal parasitic affections especially.

3. Some cutaneous affections of grave character, dependent on, or a part of serious constitutional disorders, are of less frequent occurrence and of milder type amongst us than in Europe in general, or those parts of it where they are endemic. Lupus, the syphilodermata, and leprosy are the most marked instances of this class.

4. Certain disorders of the skin, especially those connected more immediately with its nervous system, are apparently more prevalent with us than in Europe. The most notable examples of the former are: seborrhœa, acne, and possibly heat rashes; of the latter, herpes, urticaria, and pruritus.

Considerable discussion ensued regarding some of these points. Dr. Duhring, of Philadelphia, thought that massing the figures from the three cities, Boston, Philadelphia, and New York, gave a fallacious impression with respect to diseases in any one of these cities.

Dr. Bulkley, of New York, replied that the same discrepancy would be found to exist between the statistics of successive years in the same institution. He thought by collating the figures derived from reports of these localities, extending over a series of years, as the reporter had done, a very fair idea could be obtained of the prevalent skin diseases of the country.

Some discussion also took place on the use of the term morphœa by the reporter, and the relations borne by this disease to other affections sometimes called by the same name, as Addison's keloid, linear atrophy and scleroderma. Various opinions were expressed by Drs. Bulkley and Duhring, and by the reporter, the conclusion finally reached being that the term morphœa had been used in the sense generally understood by American dermatologists. The reporter's propositions were then taken up one by one.

On the subject of some of the affections mentioned, as prurigo and leprosy, no difference of opinion seemed to exist relative to the occurrence of these affections now in America. As regards the latter, Dr. Bulkley related a case which had come under his observation, occurring in a person of healthy American parentage, who had never been sixty miles away from New York. Cases were alluded to by the reporter as occurring in some of the Southern States, as well as the well-known

leper colony in Nova Scotia. As regards the severity of syphilis, as it is found in this country, the different members of the Section seemed to have had a different experience. Dr. Duhring said he was quite sure he had seen as large a proportion of very severe cases of this disease in Philadelphia as he had seen abroad.

The various propositions presented by the reporter were finally passed, it being placed on record, however, that the sense of the Section regarding the third proposition was understood to be, that lupus vulgaris is of a milder type and less prevalent in this country than in Europe; that leprosy is not sufficiently known to warrant an expression of opinion; and that, upon the subject of the syphilodermata, the Section differ from the reporter.

Dr. Bulkley offered the following additional proposition, which was adopted by the Section:—The type of certain acute congestive and nervous diseases of the skin is more severe in this country than abroad.

The chairman called attention to a paper entitled "Verugas, a Disease peculiar to Peru," by Dr. Ward, of Lima, which had been sent to the Section. On motion, the paper was referred to a committee.

Tuesday, Sept. 5th.—The Section met at 2 o'clock. Lucius Duncan Bulkley, M.D., of New York, Reporter, read a paper on the question,

ARE ECZEMA AND PSORIASIS LOCAL DISEASES, OR ARE THEY MANIFESTATIONS OF CONSTITUTIONAL DISORDERS.

He considered the nature of the eruption in constitutional disorders affecting the skin, as in the contagious fevers, syphilis, etc., and also the characteristics of local diseases; also the microscopic anatomy of eczema and psoriasis. He then studied the clinical history of eczema and psoriasis, according to age, sex, location, relapses, hereditary transmission, gouty and rheumatic symptoms, urinary disturbances, bronchitis, etc. He then examined into the clinical history of local diseases, epithelioma, verruca, parasitic and mechanical diseases of the skin, etc., the effect of local and constitutional treatment, etc. The propositions brought forward by him aroused much opposition, and were debated one after another, the discussion lasting the whole afternoon. The debate seemed chiefly to turn upon the nature of eczema, and the various pathological theories connected with dyscrasia, diseases of the blood and the cellular pathology, as bearing upon this affection.

The propositions as finally adopted by the Section were as follows:

1. Eczema and psoriasis are diseases *sui generis*, and are not to be confounded in any way with other states; as the former with artificial dermatitis, and the latter with the eruptions of syphilis, scaly eczema or leprosy.

2. Eczema and psoriasis cannot own a double independent causation or nature, at one time local and another constitutional; but with other diseases, they may have a twofold cause, namely, a predisposing and an exciting.

3. Eczema and psoriasis in many of their features resemble the accepted constitutional diseases more than those recognized as local.

4. Local causes play an important part in the etiology of eczema; they are probably inoperative in psoriasis.

5. Certain relationships between psoriasis and epithelioma have been claimed, which require much further investigation. At present they are not established, and are no proof of the local nature of psoriasis.

6. No direct causal connection has yet been demonstrated between the scrofulous state and eczema and psoriasis.

7. Local treatment is often insufficient alone to remove the lesions of eczema and psoriasis, and cannot prevent or delay relapses.

8. The success of local treatment in eczema and psoriasis does not demonstrate the local nature of these affections.

9. Constitutional treatment alone and singly can cure many cases of eczema and psoriasis, and prevent or delay relapses in a certain proportion of cases; under constitutional treatment it is intended to signify every agency not properly placed among local measures.

10. The total weight of argument is that eczema and psoriasis are both manifestations of constitutional disorders, and not local diseases of the skin.

Prof. Rudnew, of St. Petersburg, then read a paper entitled,

"WHAT IS THE DISEASE KNOWN AS LUPUS?"

by Dr. Woskrensky, of the Institution of Pathological Anatomy, St. Petersburg, under Prof. Rudnew's directions. The name was originally loosely applied, just as "sarcoma," "cancer," etc., were. The changes of the tissues in lupus have no signs by which it can be considered a separate and independent disease. It is merely a name applied to several species of tumors. From personal observations in facial cases, he considered that all the different varieties might be classed under three divisions:—1, a form which is simply a horny cancer, and incurable; 2, adenoma simplex, or confounded with the cancer; 3, granuloma syphiliticum, easily cured.

Wednesday, September 6th.—Freeman J. Bumstead, M.D., late Professor of Venereal Diseases at the College of Physicians and Surgeons, New York, Reporter, read a paper on

THE VIRUS OF VENEREAL SORES; ITS UNITY OR DUALITY.

The following propositions were stated by the reporter:

1. The virus of venereal sores is dual.

2. Venereal sores may be due to the inoculation of the syphilitic virus, and also to the inoculation of the products of simple inflammation.

3. These two poisons may be inoculated simultaneously.

The second proposition aroused a lively debate, the reporter being understood to express the view that there was no specific chancroidal virus. At the suggestion of the chairman, the proposition was divided into two sections. The first of these was passed without discussion; but as to the second, all that portion of the original proposition which follows the word "virus," was, after long debate, rejected by the Section.

In connection with the second proposition, Dr. Bulkley offered the following, which was adopted by the Section:

The present state of science has demonstrated that suppurative inflammatory lesions resembling chancroids may be produced on different portions of the body by inoculation with simple pus from various lesions.

A paper by Dr. Drysdale, of London, bearing the

same title as that of Dr. Bumstead, was then presented by the Secretary, and, on motion, was passed by title.

The Secretary then read a paper entitled

LEPROSY IN THE SANDWICH ISLANDS.

By Dr. F. H. Enders, Government physician. They believed it was introduced from China, but probably this was not so. The writer was unable to say positively whether it was a disease *sui generis*, or a form of syphilis, although he inclined to the latter view. He had seen over four hundred cases, all of whom except two had had syphilis. Two forms of leprosy were met with, the anæsthetic and the tubercular, cases of which were cited. Many interesting facts in its history, treatment, etc., were given.

SEBORRHŒA.

Dr. Heitzmann, of New York, read a paper on "The Treatment of Seborrhœa." A discussion upon the subject of this paper ensued, in which various members of the Section gave their experience in the treatment of the affection.

THE CONSTITUTIONAL TREATMENT OF SYPHILIS.

Thursday, September 7th. The Section met at two o'clock P.M. A paper was read on "The Treatment of Syphilis with Special Reference to the Constitutional Remedies appropriate to its various Stages; the Duration of their Use, and the Question of their Continuous or Intermittent Employment;" by E. L. Keyes, M.D., Adjunct Professor of Surgery and Professor of Dermatology in Bellevue Hospital Medical College, New York, Reporter.

The propositions presented were as follow:

Negative conclusions: views for which there would seem to be no foundation in fact.

1. Syphilis commencing mildly needs but little treatment, and does not require mercury.
2. Mercury given internally is necessarily debilitating.
3. Mercury is only useful in secondary syphilis.
4. Iodide of potassium is of considerable value in secondary syphilis.
5. Iodide of potassium is of no value unless preceded by the use of mercury.
6. Iodide of potassium acts by liberating mercury which has been lying latent.

The following positive conclusions, which in the present state of our knowledge may be affirmed, were then enunciated by the reporter, and laid before the Section.

1. Mercury is an antidote to the syphilitic poison, and of service in controlling all its symptoms in all, even the latest stages, of the disease; its power over gummata being least, and not to be relied upon.
2. Mercury in minute doses is a tonic.
3. Iodine cures certain symptoms of syphilis, but does not prevent relapses.
4. Mercury long continued uninterruptedly, so far as practicable in small doses from the time of earliest eruption, constitutes the best treatment of syphilis.

These propositions gave rise to much debate, the discussion for the most part including the question of continuous or interrupted methods of treatment. It was finally conceded that the statement was of a scientific nature, and suggested the object to be aimed at, rather than that which is generally attainable.

Dr. Drysdale's paper, bearing a similar title to that of Dr. Keyes, was, on motion, accepted by title.

The paper by Dr. Ward, of Lima, entitled "Verugas a Disease peculiar to Peru," was, on recommendation of the committee appointed to examine it, passed by title.

Friday, September 8th.—The paper of the day was by Dr. S. Engelsted, of Copenhagen, and was entitled, "Measures to prevent the Propagation of Venereal Diseases in Denmark."

Some discussion on the subjects presented in the paper ensued, after which the following preamble and resolutions were proposed by Dr. Bulkley and adopted by the Section:

Whereas, After an interesting and valuable paper by Dr. Engelsted, of Copenhagen, in regard to the prevention of venereal diseases in Denmark, in which the laws which have been in successful operation there are given in full, with statistics showing very favorable results;

Whereas, At recent meetings of the American Medical Association, Drs. Gross and Sims have advocated measures in reference to their control; therefore,

Resolved, That this Section do recommend that the International Medical Congress, convened at Philadelphia, Sept. 4th–9th, 1876, do appoint a committee to consider the subject more fully, to collect statistics and data, and to report through the medical press, with a view to influence laws which shall have the aim of diminishing and rendering less severe venereal diseases throughout the world.

(These resolutions were presented to the Congress at its final session, but were not adopted.)

The Section then adjourned *sine die*.

SECTION OF BIOLOGY.

Monday, September 4.—The Session met, Prof. S. E. Chaillé, of New Orleans, in the chair; Dr. James Tyson, of Philadelphia, Secretary.

MICROSCOPY OF THE BLOOD.

Prof. Christopher Johnston, Reporter, read a paper on this subject, in which he inquired into the original source of blood in vertebrates; and the elements of blood in them. The normal elements having form were exclusively considered, from two points of view: that of anatomy and physiology, and of medical jurisprudence. He discussed the genesis of corpuscles; the form of colored corpuscles, and their structure; leucocytes; the size of colored corpuscles and their enumeration, and the relation of the colored blood-corpuscles to medical jurisprudence.

The discussion which followed was almost a repetition of that had at the recent American Medical Association meeting, and was confined to the medico-legal application of our knowledge of the size of the red blood-discs. The reporter took the ground that it was impossible to identify by their size the red discs of human blood from those of other mammals nearly related in size.

The chief point at issue was stated by Dr. J. G. Richardson, of Philadelphia, to be as follows:

He said, if his memory served him correctly, Prof. Johnston had mentioned that when Dr. Woodward showed him a series of specimens of blood-corpuscles, including samples of guinea-pig, dog, and man's blood, he found it impossible to discriminate one from the other. This result was exactly what he would have anticipated, but he would like to ask Dr. Johnston whether, in case Ananias (by way of complete antithesis to Dr. W.) offered him a slide for inspection, and concealing the label, told him it was sheep's blood, he could not, if the corpuscles proved on measurement to be $\frac{1}{3200}$ of an inch in diameter, say most emphatically, "Ananias, you lie?"

Dr. Didama, of Syracuse, New York, was inclined to agree with Dr. Richardson's general views on the subject.

Dr. Tyson, of Philadelphia, thought we might go so far as to say that such blood was more likely to be the blood of man than of an ox, or sheep, or pig, but would not be willing to say positively such blood was derived from a human being rather than from one of the animals mentioned; he could not but think, with his present knowledge, there might be circumstances in the drying, age, or texture of the fabric on which they lay, which could make it impossible to distinguish human blood-corpuscles from others, even as much smaller as those of the ox and sheep.

Dr. Joynes, of Richmond, Va., inquired of Dr. Richardson how far the original character of corpuscles, dried on cloth or similar textures, could be restored by maceration, and expressed the fear that difficulties of this kind might cause error.

Dr. Richardson replied that it had been pretty well determined that while corpuscles may shrink from five to ten per cent. in their original diameter in drying, it had not been found that they swell or increase their diameter by soaking. In conclusion, he exhibited under a Holmes Class microscope a red blood disc from the Amphiuma tridactylum, the hæmatocrystallin of which had crystallized in the upper end of the corpuscle, whilst the nucleus occupied the lower extremity, leaving the membranous corpuscle (cell wall) hanging in folds like a half flaccid balloon between them.

EXCRETORY FUNCTION OF THE LIVER.

Tuesday, September 5th.—Prof. Austin Flint, Jr., of New York, Reporter, addressed the Section on this subject. It was an interesting re-statement of the well-known views of the reporter, that cholesterine is an excrementitious substance, bearing the same relation to the liver that urea bears to the kidneys; is discharged in the bile into the small intestine; is transformed during digestion into another substance (stercorine), and, as stercorine, exists in the fæces.

Prof. Dalton, of New York, then followed in some interesting remarks on the "Importance of Physiological Chemistry in Physiology," and alluded to Dr. Flint's investigations as being in this direction. He gave also a history of the succession of discoveries connected with this subject, beginning with the finding of cholesterine in gall-stones, and culminating in Dr. Flint's elaborate investigations and discoveries.

Dr. Flint's views were generally concurred in.

Wednesday, Sept. 6th.—Prof. Rudnew, of St. Petersburg, Russia, read several papers appropriate to this Section, from investigations made under his direction:

One by Dr. Jäntchich, on the "Termination of the Nerves in the Human Skin."

One, by the same, on the microscopical anatomy of the nervous apparatus of the bronchia and lungs; and two other papers on kindred subjects; but the descriptions being minute, although interesting, do not admit of the possibility of an abstract.

PREVENTION OF FUNGOUS GROWTHS.

Dr. Joseph G. Richardson, of Philadelphia, then read a paper on "Fungous Growths in Solutions for Hypodermic Medication, and their Prevention by Salicylic Acid."

He stated that the atoxic property of salicylic acid, superior to most powerful antiseptics, suggested its employment to prevent growth of tufts of fungi in morphia solutions, and in order to test its precise value, he devised a series of experiments, in which different quantities of salicylic acid were added to the usual Magendie's solution, other portions of the same fluid being allowed to remain unprotected for sake of comparison. His results showed that even in summer morphia solution remained for over a month almost free from fungous growths, when it contained one grain of salicylic acid to the ounce of liquid; when the quantity of acid was doubled, the fluid was preserved entirely clear of fungi. He also proposed the use of salicylic acid as a preservative for medicinal solutions of other alkaloids or salines, and for vegetable infusions.

In reply to a question of Prof. Dalton, Dr. Richardson said that although he had repeatedly injected his own arm with solutions containing fungi, he had never experienced any inconvenience either by formations of abscess or by general symptoms attributable to it.

Thursday, Sept. 7th.—Prof. Harrison Allen, of Philadelphia, Reporter, read a paper on the "Mechanism of Joints," which contained many novel suggestions and facts. It was shown, for instance, that when the ball is supported by the socket, as at the occipito-atloid articulation, rest is suggested, but when suspended from the socket, as at the temporo-maxillary articulation, motion is suggested. In illustration, the etiology of fracture and dislocation was examined. Articular surfaces were studied in three classes: axial, actinic, and lateral, and these terms defined with examples. A correct knowledge of the symptomatology and treatment of diseases of the joints was shown to be dependent on a true conception of the complex nature of articular surfaces.

Prof. Dalton said the paper contained much that was new to him, and explained some points which had long been unexplained, and that the same reasoning might also be extended to the ligaments. While dissecting joints as a student of medicine, he had been struck with the fact that in flexing and extending the limbs, it was impossible to say when certain parts were put upon the stretch and when they were not. He thought this might be explained by supposing the internal surface of the capsule to be made up of innumerable facets brought successively into action, just as Dr. Allen had shown to be the case with the curved articular surfaces of the bones.

With the exception of several papers on Friday, presented by Prof. Rudnew, of St. Petersburg, from Russian investigators, on "Sclerosis of the Arteries," "Cancer in the Lymphatic Glands," etc., no other paper of importance was discussed in this section.

SECTION OF SANITARY SCIENCE.

Monday, September 4th.—The Section had assigned to it as Chairman, Dr. Stephen Smith, of New York, and Dr. Ezra M. Hunt, of New Jersey, as Secretary; Dr. Billings, U.S.A., and Dr. Baker, of Michigan, as Vice-Presidents. In the absence of Dr. Smith, Dr. Billings presided.

DISEASE GERMS.

The Session was almost entirely occupied by the paper of Dr. T. E. Satterthwaite, of New York City, Reporter, on "Disease Germs." It presented in a concise way, the vegetable germ theory, the bioplasm theory, and the physico-chemical theory. A fair exhibit was given of the arguments adduced in support of each of these. The author recounted his own experiments and those of Dr. Edward Curtis, of New York City, and presented diagrams of the various appearances under the microscope, and specimens of vacuum-tube experiments. Right emphasis was laid upon the point

that motion does not always indicate life. Fluids were shown still to be poisonous after such filtration as would separate vegetable organisms.

The following general topics were discussed:—The agency of minute vegetable organisms in fermentation and putrefaction; epidemic diseases of plants and animals in their relation to such organisms; rapid multiplication of bacteria *pari passu* with the rapid spread of disease manifestations throughout the system; constant ratio between the most active changes in so-called septic diseases, as pyæmia, erysipelas, and puerperal fever, with numerical increase in bacteria at points involved; can any strictly chemical substance be a fever producer; bacteria and disease poisons, their capacity for successfully maintaining active properties; inoculation of bacteria in healthy tissues.

The following special topics were also considered:—

1. Bacteria: their classification, diagnosis, and appearances under varying conditions.

2. Poisonous fluids of infective diseases, their physical properties and the solid particles contained in them.

3. The value of vacuum-tube experiments.

4. How far are the bioplasm, or physico-chemical theories competent to explain spread of infective diseases?

5. Poisons of special diseases, as cholera, small-pox, carbuncular diseases of men and animals, typhoid and relapsing fevers, and diphtheria, are not proved to be dependent on these minute organisms. The poison of diphtheria membrane, for instance, killed twenty out of twenty-seven rabbits, when no bacteria were present.

The paper was discussed by Drs. Henry Hartshorne, of Philadelphia, Hunt, of New Jersey, Billings, U. S. A., and others.

Dr. Billings preferred the term "minute vegetable organisms" to the terms bacteria, microzymes, etc., so often used, as these latter seemed to state a theory.

Dr. Hunt quoted Pettenkofer as saying, "what germs are, we do not know." The bacteria found in various infective diseases cannot be distinguished from one another, or from those of healthy persons. Billroth makes them all forms of one mother plant. The views of Klein and the hope of Simon that the contagion of enteric fever had been found, were alluded to, and also those of Oertel in reference to diphtheria. Dr. Hunt claimed that fermentation and putrefaction must be studied as separate decompositions, and that vegetable organisms were most frequently the effort of nature to dispose of the débris of disease, and so conservative—except where, from great accumulations, they might become themselves a source of evil.

Dr. Hartshorne expressed the view that we did not sufficiently recognize this compensating effort in nature; but still as there are venomous insects that have no conservative work, so there are such factors of disease.

The germ theory also came up prominently in the Surgical Section in connection with the antiseptic treatment of Prof. Lister. The Sanitary Section adopted the conclusions proposed by Dr. Satterthwaite after slightly modifying them, and the paper was recommended for publication.

The conclusions were as follows:

1. That so far as inquiry has been made into the nature of the active principles in infective diseases, it is probable that in a certain number the matter is *particulate* or *molecular* in form, and, in the instances named, in no sense a soluble substance.

2. That in regard to the *causes* of septicæmia, pyæmia, puerperal fever, erysipelas, and hospital gangrene, and in cholera, small-pox, the carbuncular diseases of men and animals, typhoid, relapsing fevers, and diphtheria, there is not satisfactory proof that they are necessarily connected with minute vegetable organisms.

3. That the real nature of these causes is still uncertain.

VITAL STATISTICS OF BUENOS AYRES.

A paper on this subject was offered by Dr. Rawson, of that city, and referred to a committee for examination. Abstracts were read from it the next day. It contained some interesting matter, but did not, amid the imperfection of registry, throw much light on the subject. It noted the fact that offal, sometimes to the amount of 390 tons daily, was carried out of the city and burned. It insisted on the importance of looking to the health of native-born children in every country, as these are generally better members of society than immigrants. The frequency of trismus nascentium was noted, causing at times 6.5 per cent. of all the mortality. Parts of the paper were worthy of a place in the Transactions, and it was referred for publication.

HOSPITAL CONSTRUCTION AND VENTILATION.

Tuesday, Sept. 5th.—The Section was occupied with the paper of Dr. Stephen Smith, of New York, Reporter, on these subjects, and with a detail of the more recent plans for the "Johns Hopkins Hospital," by Dr. Billings, of Washington.

Dr. Smith's paper was designed to show the very advanced position of that art at the close of the century 1776, the comparatively little progress made during the century 1876, and the present status of hospital reform. The position of the art in 1776 was illustrated by:—*First.* The New York Hospital, a pavilion hospital, then recently destroyed by fire, which had been built according to plans brought from England by Dr. John Jones; and has not been surpassed in its essential features, especially in regard to the separation of the sick by large surface and cubical areas. *Second.* The report of Committee of French Academy of Sciences, 1788, on rebuilding the Hôtel Dieu, giving in much detail the pavilion plan. These embodied in its highest state of perfection what is now recognized as the pavilion hospital. Little progress was made during the nineteenth century, except the building of the Lariboisière, of Paris, on the pavilion plan, until the Crimean war, when the pavilion system was again revived by Miss Nightingale. While the reform of military and quarantine hospitals is all that can be desired, too little progress has yet been made in location and construction of civil hospitals. Propositions were submitted embodying latest suggestions of science and experience.

Dr. Billings, after a lucid explanation of the plans of the Johns Hopkins Hospital as at present suggested, and the reasons therefor, compared at length the different plans of ventilation, and showed why the fan was often more available and more adapted for combination with natural modes than the aspirating method. He drew attention to the tendency of air to cling to surfaces, and presented the results of some anemometer and other experiments as to heating and ventilation conducted within the past year at a hospital in Washington.

Many questions were asked and considerable discussion ensued, in which Drs. Henry Hartshorne, Bowditch, Hewitt of Red Wing, and others participated. Drs. Bowditch and Hewitt especially insisted that we depended too much on physicists and experiments, and that, after all, the sensations of the patients and the

experience of the physician were more reliable. Others regarded mere sensation as unreliable, and only to be compared with other indications. The paper was referred to the Congress for publication, without formal adoption of its conclusions.

GENERAL SUBJECT OF QUARANTINE.

On Wednesday, September 6th, the paper on Quarantine, with particular reference to cholera and yellow fever, by Dr. Woodworth, Supervising Surgeon-General, Marine Hospital Service, Reporter, with its discussion, occupied the whole session.

After reviewing briefly the practice of quarantine in the past, and as at present administered, the mode of propagation of cholera and yellow fever were discussed with the view of arriving, as near as possible, at what precautions are necessary and what restrictions superfluous in the administration of quarantine.

The chief points were the practice and methods which should be pursued to secure greatest protection to public health against cholera and yellow fever with the least restriction upon commerce. In this connection were considered the want of prompt information to threatened ports of the shipment of passengers or goods from infected districts; the question of time as an element in quarantine; the value and practice of disinfection; the importance of municipal sanitary co-operation; and what may be gained by imparting to masters of vessels correct views of sanitary measures to be enforced by them in outbreaks of cholera or yellow fever on shipboard, etc.

The papers involved the chief laws of sanitation, of contagion, and of specifics of disease, and had material for the fullest discussion, in which Drs. Vanderpoel, Hartshorne, Murray, and others took part. Dr. Vanderpoel's personal experience was listened to with interest, and other speakers showed an intelligent acquaintance with the defects of ship regulations. Some discussion took place as to the relation of filth to disease, and the distinction was urged between filth as a nest, and filth as a creator of the disease germ, and so an originator of a specific disease.

With some slight modifications, the conclusions presented were adopted, and the paper highly commended for publication.

DISPOSAL OF SEWAGE.

Thursday, September 7th.—The Section was occupied with the subject of "The Disposal of Sewage." Dr. Henry Hartshorne, Reporter, read a paper setting forth the various plans for this object, giving preference to the water method and to soil filtration through drained land, so that value to crops and perfect conveyance to water-courses could be secured.

Dr. S. W. Gross presented a plan of sewer ventilation, suggested by a Philadelphia engineer.

Dr. J. G. Kerr, of China, spoke of Chinese methods. The chief idea in China was to dispose of offal above ground, while we sought to place it below ground. He believed epidemics were not, as a rule, so severe in Chinese cities, because they avoided soil saturation and soil pollution.

Dr. Johnson, of Salem, Mass., noted the evils arising from inflowing tide meeting outflowing sewage, and so often causing sewer pollution. The conclusions of the paper were modified so as not to give exclusive prominence to any one method of disposal.

UNIVERSAL PHARMACOPŒIA.

Dr. Squibb, of Brooklyn, read a paper on this subject, which, in the absence of a materia medica or pharmacy Section, had been assigned to preventive medicine. Mistakes arise from confusion in nomenclature. Dr. Squibb showed in what respects a universal pharmacopœia would be of service, and yet recognized such embarrassments as to preclude a hasty attempt in that direction. In the meantime he claimed that greater uniformity should be sought and unnecessary diversity of names be avoided.

PHARMACY AND MEDICINE.

Dr. Hunt, of New Jersey, also read a paper on the evils arising from separation of pharmacy and medicine. He claimed that pharmacy, like any specialty of medicine, should be a department rather than accessory, and should be replaced within the profession, and so held accountable to its ethics. It was ably discussed by Drs. Steiner, of Maryland, Squibb, Hartshorne, and others. All the papers were referred for publication.

WEIGHTS AND MEASURES.

Friday, September 8th.—Dr. Squibb presented an able paper on "The Medical System of Weights and Measures." It showed the feasibilty of the system, and the methods by which its adoption could be facilitated. Its adoption by two prominent nationalities already, indicates its more extended use, and this should be diligently encouraged.

Dr. Bowditch noted the fact that it had met with some opposition from a prominent scientist of Boston, and Herschel had also made some forcible objections to it. Any system which is more or less arbitrary can have real objections filed against it. But this works so well in practice, that few practical operators now dissent.

MEDICAL MISSIONS.

Dr. Kerr, of China, read an interesting paper on "Medical Missions," reference being had to sanitary and other regulations in China and other countries. The paper was discussed by Dr. Harris, of New York, and such parts of it as referred to medicine were ordered to be referred for publication. The Section then adjourned *sine die*.

Correspondence.

"THE CAUSE OF CHOREA."

To the Editor of The Medical Record.

In the communication of Dr. Allen M'L. Hamilton under the above title, which appears in The Medical Record of Sept. 16th, the writer makes a few points, to each of which, though not in the order given, I desire to call attention.

Dr. Hamilton remarks: "Surely the etiology of chorea is well understood, though its pathology is not so clearly settled." Yet Dr. T. E. Anstie (*Lectures on the Nervous System*) says: "The *causation* and pathology of chorea form one of the most puzzling subjects which medical inquiry has ever encountered," and the learned author further adds: "When we have stated the very obvious facts that chorea is a disease of some portion of the central nervous system, and that the circumstances favoring its occurrence are all of them of a debilitating kind, *we have said very little, as you will allow.*"

Whether Dr. Hamilton, in his brief catalogue of "circumstances of a debilitating kind," has after

all said *very much*, I leave for him to settle with the distinguished author.

Dr. Hamilton promulgates the doctrine that if we allow that in chorea the fault lies in the eyes, we must of necessity ignore the fact that chorea is often cured by medicines.

The same kind of reasoning would prove that no man could be cured of a fever and ague so long as he remained in a malarious district; and various other novel and interesting deductions could be drawn from the same style of logic.

We are informed by your correspondent that he has examined a number of individuals, some healthy and some having chorea, and finds "no preponderance of astigmatism, myopia, or hypermetropia in either class." Dr. Hamilton, at the meeting of the Academy of Medicine, June 15th, assured its members that he had found that *strabismus* was a *common* associate of chorea; and I do not understand him to withdraw or modify that assertion; but Professor Donders, in his incomparable work on refractions, lays down these two propositions:

"1st. Strabismus convergens almost always depends upon hypermetropia.

"2d. Strabismus divergens is usually the result of myopia."

Now how does it happen that in a class of cases in which the gentleman acknowledges strabismus to be a common and characteristic feature, he still finds "no preponderance" of refractive errors in this class?

Your correspondent adds: "That the muscles of accommodation . . . . may become the seat of spasm *after the disease is established*, I have no doubt," and that we may obtain a more complete estimate of his views upon this subject, I quote from the report of the meeting already mentioned, as found in THE RECORD of August 12th: "Dr. H. continued by saying that his attention had been called to hypermetropia, and other eye symptoms in cases of chorea, and he had invariably found that *they were secondary*."

Dr. Hamilton must pardon those who have even moderate acquaintance with affections of the eye, if they accept, with exceedingly liberal discount, the results of examinations in refraction, made by a gentleman who vainly imagines that hypermetropia and astigmatism are *secondary* to nervous diseases, or the result of *spasm*. These, with rare exceptions, and those exceptions not the result of nervous affections by any means, are *congenital conditions*.

The suggestion that the cases of chorea "were examined after the appearance of chorea," and that "had they been examined *before*, no one would have been more ready to be convinced than himself," is quite as original and valuable as that of the Irish medicine man, who assured his hearers that if they would rub a little of his opodeldoc upon their shins just before falling down, they would be sure not to be hurt.

A single point in this communication remains to be noticed. The Doctor says: "If this is a fact (that chorea and some other nervous affections are due to refractive lesions), it is about time for neurologists to buy green spectacles, or else renounce their specialty." Whether this is a legitimate conclusion, my own investigations in that direction will not perhaps enable me to judge, but if a member of a different branch of our great profession may be allowed to make a suggestion in the matter, it would be that our neurological friends, divesting themselves of all darkling glasses of prejudice, should investigate this important subject by the pure, unclouded, and uncolored light of science and of truth.

It is scarcely probable that the truth or fallacy of the doctrine I have advanced will be established by these epistolary communications, and I intend no disrespect to the author of the communication which I have noticed, in stating that I should probably not have been tempted to this reply but for the opportunity afforded of making a suggestion which I deem of much importance in respect to examinations of eyes in this class of patients. There seems to be a prevailing impression among many ophthalmic surgeons that the presence or absence of hypermetropia can always be established by the use of the ophthalmoscope, even when the accommodation of the patient is under no restrictions from mydriatics. This impression, I am convinced, is not well founded. Nearly every ophthalmic surgeon will probably claim for himself the ability completely to relax his own accommodation when using the ophthalmoscope. There are good reasons for believing that some who claim this ability are laboring under a mistake; but independent of this, even if all surgeons possessed this power, all patients do not. So long, then, as we cannot be sure that the accommodation of the patient is fully relaxed, the absence of hypermetropia cannot be determined, especially in young persons, unless indeed the reverse condition be found; and even in some cases of apparent myopia, hypermetropia actually exists. Prof. Donders says: "Without producing paralysis of accommodation, we are never perfectly sure that we determine the refraction in the condition of rest."

In my own experience I find this proposition is especially true in respect to children and youth. Young persons who, without the use of atropine, present an apparently perfect state of the refraction, will often exhibit, after atropine has been used, a hypermetropia of 1-24, of 1-20, or even of a higher grade. Hence the importance of using atropine in all cases of chorea where the evidences of refractive errors without its use appear to be negative.

I think it but right to say that a series of examinations in this class of cases in which negative results are found, and in which atropine has not been used, is entirely unreliable.

GEO. T. STEVENS.

ALBANY, September 18, 1876.

METROPOLITAN PRACTITIONERS AT WATERING-PLACES.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—It has been my desire to avoid the disagreeable necessity for entering upon a personal explanation in a public journal, but the tenor of your editorial, in your last issue, on the subject of "Hotel Physicians and Rural Practitioners," is such as to demand some additional notice of the matter. M. C. E.'s charges are of too serious a character to be passed over so lightly.

With regard to the question of the propriety or necessity for the appearance of "metropolitan practitioners" at watering-places, I do not care to trespass on your space by entering upon its discussion, except to say that all prominent physicians who spend a season at a watering-place bring a very considerable amount of custom with them—their own patients and those commended to them by medical acquaintances; they have a right also, as you concede in your editorial, to accept any other patients who may wish their services. The former is their *principal* source of profit, at all events, so far as my experience goes. My experience in hotel practice in other places is limited; but from my knowledge of the character and standing of those physicians who, as I hear, put up signs

at watering-places, of which I do not approve, and which is not done at Saratoga, I cannot help thinking that you are too sweeping in your comments on their practices. You probably have in view some exceptional case or cases. It may not be out of place to state here that the only man who, in the knowledge of the writer, is generally talked of and admitted to be a "hotel physician" is M. C. E. himself.

As regards my personal connection with this matter, let us come to the point at once. M. C. E. charges *general* dishonorable and dishonest conduct against the three or four physicians who are known to be located at the principal hotels in Saratoga. Then he charges specific unprofessional acts. There are so few of us to whom these charges could refer, and the fact is so well known, at least to the profession of New York, that we feel as if any attempt to conceal our names would be mere affectation. In fact, M. C. E. stated publicly that the *specific* charges referred to me, and that he could prove them. Learning this, I went immediately to his office, and asked him for his proof. He first refused to admit the authorship of the article; then my right to "take it to" myself. He then *denied* having said to Dr. Janvrin that I had requested permission at the hotel to put up a sign. But Dr. J. is positive on this point. He then said he *had been told* that my card had been *found under the door* of a patient then under the charge of a resident physician. This is almost too absurd for any one to notice. If the card *was* found, it could only have been placed there by one interested in injuring me, or in bringing discredit on all of us. I leave it to you and your readers to draw your own inference as to the real author of this low trick. As to sending "circulars" he could only ask, "Did not a notice of you appear in the *Medical News and Library?*" referring to a friendly notice, by the editor, of my removal to Florida. I then denounced his whole article as "false," so far as it referred to me, and "devoid of any foundation whatever," and demanded whether he would make any reparation, or would compel me to take the matter in my own hands. On the day after, I wrote him a note to the same effect, in order to put our conversation on record, and handed it to him at his office.

A further reason for noticing this article personally is that it was put bodily in the Saratoga paper having the largest circulation, and also circulated to a certain extent about the village and the hotels, or its contents made known, to the presumed benefit of its author and his worthy coadjutors, and to the corresponding injury of the metropolitans. So far as the charges may refer to Drs. Janvrin and Burchard, I am requested by them to give an unqualified denial.

Respectfully yours,

F. D. Lente, M.D.

Medical Items and News.

American Otological Society.—The ninth annual meeting of the American Otological Society was held Sept. 15th, at Chickering Hall, New York City. Dr. Roosa declined re-election as President, and the following officers for the ensuing year were elected: *President*, Dr. C. J. Blake, Boston; *Vice-President*, Dr. A. H. Buck, N. Y. City; *Secretary and Treasurer*, Dr. J. Orne Green, of Boston; *Committee on Publication*, Drs. Blake, Green, and Prout; *Committee on Progress of Otology*, Drs. Spencer and Sexton. The session then adjourned *sine die*.

The International Otological Society convened at the adjournment of the American Society. A constitution for the government of the organization was adopted, after which the following officers were elected: *President*, Dr. D. B. St. John Roosa, N. Y. City; *1st Vice-President*, Dr. E. L. Holmes, of Chicago, Ill.; *2d Vice-President*, Dr. A. H. Buck, N. Y. City; *Secretary and Treasurer*, Dr. J. S. Prout, of Brooklyn, N. Y.; *Corresponding and Assistant Secretary*, Dr. C. J. Kipp, of Newark, N. J.; *Committee on Publication*, Drs. Mathewson and Rushmore, of Brooklyn, with the two Secretaries.

A number of papers on various subjects connected with otology were then read and referred to the Publication Committee. The Society finally adjourned to meet in 1880, at the place of meeting of the International Ophthalmological Congress. A committee, composed of Professors A. Politzer, S. Moos, and R. Voltolini, and Dr. N. Löwenberg, was appointed to make the necessary arrangements for the meeting.

Hospital for Incurables in Paris.—Madame Hagelle, of Paris, has given ten million of francs to found a hospital for incurables at Paris. This will give a worthy object a good start, and perhaps anticipate a similar movement in this city, provided a medical man who has made the cure of these diseases a specialty can be secured to take charge of the institution.

Splenotomy.—M. Péan recently presented to the Académie de Médecine two patients upon whom he had successfully performed the operation of splenotomy. One of the cases was operated on in 1867, and subsequently presented to the Academy in good health. The second case, which had just recovered, was a married woman aged twenty-four years. A splenic tumor had been growing, until at the end of eighteen months after its first appearance, when it filled the entire abdominal cavity, descending into the pelvic, and even to the right iliac fossa. Various symptoms, apparently secondary to the tumor, distressed her, and abdominal pain was constant. Yielding to the importunities of the patient, M. Péan excised the spleen on the 25th of last April. The London *Lancet* (Aug. 26th) thus describes the details of the operation:

"An incision was made along the linea alba from three inches above the umbilicus to two and a half above the pubes, and a corresponding incision was made through the peritoneum. The tumor was covered by the omentum; this was removed from below upwards and pushed to the right of the tumor, beneath the right hypochondrium, and both it and the intestines were kept back by sponges and warm napkins. The tumor had the characteristic reddish-violet color of the spleen. It was seized at its lower extremity and gradually raised within the lips of the wound until it rested on the hands of the assistants who were keeping back the intestines. No other organ escaped. The gastro-splenic omentum was about three-quarters of an inch wide at the level of the hilus; it contained blood-vessels and enormous lymphatics. One splenic vein was the size of the index finger. A wire ligature was passed around the whole pedicle, great care being taken to avoid the pancreas. The pedicle was then surrounded by sponges and the spleen separated from the hilus by a single cut, being at the same time turned quickly outwards. About a quart of blood escaped in a jet from the spleen, but none fell into the abdomen; otherwise not more than thirty grammes of blood were estimated to be lost. No adhesions were met with. The sponges were removed, the great omentum spread out over the intestines, and

the abdomen closed, the pedicle being retained between the lips of the wound. The progress of the patient was excellent. The febrile reaction was slight. Some blood appeared in the urine on the third day, but diminished and disappeared a few days later. The pedicle separated in a week. The patient's spirits were very good. Eighteen days after the operation she sat up, and a week afterwards returned home."

Although this operation is a brilliant one, it must still be regarded as hazardous in the extreme, and almost under the ban of absolute prohibition.

Retiring Pension of English Army Surgeons.—There is the same difference of value placed upon the services of a combatant officer in the English army, as compared with those of the medical officers, which exists in this country. The *Lancet* says: "Now in the case of the combatant officer who is younger on entering the service than the medical officer, and has his profession to learn instead of having acquired it, the retiring pension is £200 per annum, the commuted value of which, at the age of the retiring officer, at the rate of 5 per cent., is £2,648, while in the case of the medical officer who has served for ten years, or half the time, it is only £1,000—and yet some medical men are anxious to become army surgeons.

The Russian Red Cross Society have so actively interested themselves in the care of the Servian wounded that it has become necessary for the present to stop the movement of ambulance corps from Russia to the seat of war.

Livingstone.—A statue of Dr. Livingstone, the African traveller, has been erected in Edinburgh by the side of the one of Sir Walter Scott. As they stand they are singular company for each other, both benefactors to posterity, and both joining romance and reality from diametrically opposite standpoints.

Dr. Gurdon Buck.—We are gratified to learn that the health of this distinguished surgeon is so far improved that he is enabled to walk about his room and occasionally to enjoy a drive. At present he is availing himself of a change of air in the country. He has the best wishes and warmest congratulations of a host of friends.

Population of France and England. — France takes three hundred and thirty-four years to double her population, while the same effect is worked in England in sixty-three years.

The Heat in India during the past season is reported to have been extraordinarily intense, having ranged over 100° F. for several successive days, scarcely falling at all during the night.

The Study of Mental Diseases in France.—A chair of mental alienation and diseases of the nervous system is to be created in the Faculty of Medicine in Paris.

Muzzling Dogs.—The Parisian authorities, believing that the muzzling of dogs, especially during hot weather, is one of the surest means of inducing hydrophobia, have abandoned the practice.

The Hygiene of Ruralizing.—A writer in The *Sanitary Record* (London), says: Not long ago a traveller in Jura, constrained by professional avocations to visit a sparsely populated portion of the island, found himself applying to a shepherd for a night's lodging. At earliest dawn he was aroused from his slumbers and called to the other room, when, with many apologies, "the gude wife" informed him that the hens required his bed to lay in, for that otherwise the eggs would be lost on the moor." If our friend had stayed to breakfast he could have assured himself that at least his eggs were fresh.

At a stated meeting of the Medical Society for the County of New York, held September 25, 1876, it was voted to grant certificates of membership to the following gentlemen: Drs. E. L. Partridge, E. J. Birmingham, and T. H. Skinner.

Introductory Lectures.—The opening address for the regular winter session of the College of Physicians and Surgeons will be delivered by Prof. Francis Delafield, on Monday evening, Oct. 2, 1876, at 8 o'clock.

The introductory lecture for the winter session of 1876-77 of the Medical Department of the University of the City of New York was delivered on Tuesday, Sept. 26, 1876, at 8 o'clock P.M., by Prof. J. W. S. Arnold. *Subject:* "The Teachings of Modern Physiology."

The Death of Dr. D. Brainerd Hunt.—The profession of this city has met with an inestimable loss in the death of one of the most promising among its younger members. Dr. Hunt was in every respect a well-educated gentleman. Graduating with honors at Princeton in 1866, he studied medicine at the College of Physicians and Surgeons, graduating from that institution in 1870, being the valedictorian of his class. He then spent three years abroad in hospital study, and at Berlin, Vienna, and Breslau availed himself of the best advantages.

He was an expert in pathology, and with microscopical studies generally, but devoted himself especially to the study of uterine diseases. In the latter department he rendered us valuable aid in the review department, and was up to the time of his death one of our most trustworthy counsellors in his specialty. Modest and retiring in his habits, he was an earnest and conscientious worker, a model Christian gentleman, and will be missed wherever skill, courtesy, and character are estimated. His death was the result of the lodgment of a plum-pit in the appendix vermiformis, causing perforation and peritonitis.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending September 23, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Sept. 16	0	25	12	2	2	31	0
Sept. 23	1	28	16	0	1	27	0

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from Sept. 17th to Sept. 23d, 1876.

Semig, B. G., Asst. Surgeon. Assigned to duty with Company "G," 1st Cavalry, near Soledad Station, Cal. S. O. 127, Div. of the Pacific and Dept. of California, Sept. 9, 1876.

Worthington, J. C., Asst. Surgeon. Assigned to duty as Post Surgeon at Fort Whipple, A. T. S. O. 108, c. s., Dept. of Arizona.

Rosson, R. L., Asst. Surgeon. Assigned to temporary duty at Camp Grant, A. T. S. O. 108, Dept. of Arizona, Sept. 5, 1876.

Original Lectures.

LECTURES ON FEVERS.

By ALFRED L. LOOMIS, M.D.,

PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

(Phonographically reported for THE MEDICAL RECORD.)

LECTURE II.

MORBID ANATOMY OF TYPHOID FEVER (CONTINUED)—INTESTINAL LESIONS—ETIOLOGY.

GENTLEMEN:—At my last lecture I completed the history of those parenchymatous changes which are most frequently met with in typhoid fever. I mentioned that these changes could not be regarded as characteristic of this type of fever, for they are present in other diseases. I also stated that by some these degenerations are regarded as the necessary result of a prolonged high temperature, but they are in no way different from those degenerations which occur as the result of blood-poisoning where prolonged high temperature does not occur. Especially is this the case in those diseases which are marked by their malignity rather than by their high temperature, as for instance, acute yellow atrophy of the liver.

Continuing the history of the morbid anatomy of this fever, we now come to those changes which occur in the lymphatic system of the intestinal track—the *intestinal lesion*. These are the most important pathological lesions, and have been called the characteristic lesions of the disease, as these intestinal changes distinguish this fever from all other forms of acute disease.

As the poison of small-pox manifests itself by certain changes in the tegumentary investment of the body, and the poison of epidemic cerebro-spinal meningitis by the formation of pus in the meshes of the pia mater, so the poison of typhoid fever acts directly upon the mucous membrane of the small intestine, giving rise to a catarrhal inflammation accompanied by changes in its anatomical structure, which, in the order of their development, are characteristic of the disease. The character and extent of these changes depend upon the duration of the fever and their nearness to the ileo-cæcal valves; the changes are most marked in the patches nearest to the valves, and less marked in those farthest removed from these valves.

In describing these intestinal lesions, I will suppose that we are examining a severe well developed case, which runs its regular course without complication. These cases can be most conveniently studied by *first* considering those which occur within the first week of the disease; then, those which are developed within the second week; next, those which are most commonly found in the third week; then those which occur within the fourth week. They appear to begin as a catarrhal inflammation of the mucous membrane. During the *first week* the mucous membrane surrounding the glands, especially that surrounding the Peyerian patches, becomes hyperæmic and swollen; gradually the glands become more and more elevated, their surface assumes a dark reddish color, interlaced by white lines; this is known as the shaven-beard appearance. These changes begin and are most marked in the glands nearest the ileo cæcal valve; they are generally well marked within forty-eight hours after the commencement of the disease, but are not fully developed until the end of the first week. By the end of the first week all the glands are involved which are likely to undergo change.

In the *second week*, the mucous membrane of the intestine becomes less red; the agminated and the solitary glands more elevated; the white lines upon their surface disappear, and they assume a uniformly red color. An unusually rapid cell development takes place in the follicles. By this excessive development and the multiplication of the cell elements of this gland structure, the follicles become swollen in all directions. Usually, the new cell growth extends beyond the limit of the follicles, so that the adjoining mucous membrane is also infiltrated with cells. These newly formed cells may wander through the muscular coat and penetrate the sub-serous tissue. By the middle or latter part of the second week the process passes into its second stage, and necrotic processes are established in the newly formed tissue. This process may terminate in two ways. First, the new elements in these ductless glands may become disintegrated and undergo absorption, and in this way they may gradually undergo resolution. Second, individual follicles of the agminated glands may rupture and discharge their contents into the intestine. Third, the most frequent and characteristic termination of this typhoid process is the separation of the dead tissue as a slough, and the formation of the typhoid ulcer. Usually the sloughing and removal of the necrotic tissue does not take place until the *third week* of the disease. The surface of the ulcers now present a yellow appearance, simply because the tissue has been stained yellow by the bile. As the sloughs gradually loosen and fall off there is a loss of substance which extends to the deeper layer of the mucous membrane, removing the entire gland and the mucous tissue surrounding it, laying bare the muscular coat of the intestine; or the necrotic process may extend and involve the muscular tissue and end in perforation of the peritoneal covering.

The size and form of the ulceration corresponds to that of the necrotic tissue; if an entire Peyerian patch is necrotic, an elliptical ulcer is formed with its long axis corresponding to that of the intestine. In the jejunum and large intestines the ulcers are usually small and round. The edges of the ulcer are sharp, tumid, and overhang the floor of the ulcer. Sometimes the ulcers are hemorrhagic.

In the *fourth week* the process of cicatrization is commenced. Gradually the swollen edges of the ulcers subside, granulation tissue springs up from their base, connective-tissue membrane is formed, the edges of the ulcers become united at their base, which is covered with a layer of epithelium. The gland structure is never regenerated. The cicatrix which is formed by the healing of these ulcers is slightly depressed and less vascular than the surrounding mucous membrane. During the healing process the cicatrix becomes more or less pigmented; these pigmented scars may be recognized years after the cicatrization has taken place. These cicatrices seldom cause any puckering or diminution in the calibre of the intestine. In many cases the process of cicatrization does not pursue this regular course; while one portion of the ulcer is cicatrized, the process of ulceration in another part may be extending; such long-continued ulceration may prolong convalescence and even cause death.

I will now briefly review these intestinal changes, and if you will bear in mind the weekly order in which they occur, you will better remember them.

The first thing noticed is congestion, which is most marked around the glands; with this congestion the

glands become changed in color. Next, the glands become enlarged, which enlargement is due to a rapid development of cells within their structure: these cells are for the most part lymphoid; but in addition there are present large round cells with several nuclei. These large round cells are formed not only in the glands, but in the mucous and sub-mucous tissue adjacent to them; consequently, the enlargement encroaches more or less upon the surrounding mucous membrane. These newly formed cells not only swell the glands and press upon each other, but they press upon the capillary vessels which furnish these structures with nutrition; consequently, there is an interference of the circulation of the gland structure, and as a result the glands become more or less anæmic; degenerative changes occur as the result of impaired nutrition.

In some of the enlarged glands the new elements become disintegrated and are absorbed, and the process ends in resolution; in others, individual follicles soften, break down, and their contents are discharged into the intestinal canal, and the patches acquire a reticulated appearance. More frequently, a necrotic process is established which causes the removal of the entire gland and its contents, leaving an ulcer with everted and perhaps overhanging edges, with the muscular coat of the intestine for its base. It is now ready for the cicatrization process, and if it progresses regularly, first the edge of the ulcer becomes inverted, then the base of the ulcer is covered with new connective-tissue cells, the edges become adherent to it, new connective-tissue cells are thrown out upon the edges, the formation of new tissue goes on increasing until finally a process of repair is complete. These ulcers do not always run such a regular course and terminate thus favorably. If the nutrition of the glands and the surrounding tissues is so interfered with that a gangrenous ulceration is established, sloughing follows, and the gland, with the muscular and other tissues in the neighborhood of the ulcers which are the seat of cellular infiltration, is removed. In some instances the necrotic process continues to extend and involves the peritoneum, causing perforation of the intestines and a fatal peritonitis. These ulcers may assume a hæmorrhagic character, with a surface of a dark color. Under these circumstances they are frequently the seat of profuse hemorrhages, which may destroy the life of the patient. Usually, when such accidents occur, vessels of considerable size are involved in the ulcerative process. Whenever the sloughing process is arrested, repair takes place in the manner already described.

As I have stated, these ulcers may be developed in the jejunum, the ileum, and the large intestines. In the lower part of the ileum, at the ileocæcal valve, they are usually of large size—so large that only small portions of healthy mucous membrane are left between them; in the jejunum and large intestines they are usually round and of small size.

Mesenteric Glands.—Associated with these intestinal changes, analogous changes take place in the mesenteric glands. These mesenteric changes are also most marked in the glands situated nearest the ileocæcal valve; they are secondary to the changes in the intestinal glands, and are usually effected in a degree corresponding to the extent of the intestinal lesions. The glands are first contested, then there is a production of lymphoid and large cells similar to those which are found in the enlarged intestinal follicles, the glands become enlarged, and are the seat of an acute cellular hyperplasia. When the enlargement has attained its full size, the hyperæmia diminishes, and the cellular elements begin to disintegrate and are absorbed. In about one-half the cases the enlargement reaches its maximum size by the middle of the second or at the commencement of the third week. The enlarged glands vary in size from that of a hazelnut to a small hen's egg. In the stage of retrogression some of the glands simply shrink and return to their normal condition; in other glands partial softening takes place and afterwards absorption, leaving a fibrous cicatrix. If the glands reach a very large size, absorption is incomplete, and dry, yellow, cheesy masses are left, in which after a time salts of lime are deposited and they become enclosed in a fibrous capsule. In rare instances the glands become fluid, their capsules are destroyed, and the softened masses escape into the peritoneal cavity and cause peritonitis.

A calcareous condition of the mesenteric glands, like the pigmented cicatrices of the solitary and agminated glands, gives evidence of a previous severe attack of typhoid fever. There is yet another pathological lesion of typhoid fever occurring during convalescence, concerning which I will speak—that is, a suppurative inflammation in the cellular tissue upon the surface of the body. The inflammation is not of an active type, but is accompanied by some redness and pain; gradually a tumor is formed at the seat of the inflammation, usually this occurs where there is the greatest amount of pressure. After a time fluctuation becomes distinct, the swelling increases; sometimes two or more of these swellings coalesce, and finally an immense abscess may be formed, which when opened will discharge a pint or more of pus. These abscesses are due to suppurative inflammation in the cellular tissue of the skin. Retro-pharyngeal ulcers are the result of suppurative inflammation of the connective tissue. As a result of imperfect nutrition of the skin, a gangrenous inflammation of the skin may be developed, which gives rise to "bed sores," as they are commonly called. These are especially liable to occur in the latter stages of typhoid fever which has been attended by a prolonged high temperature. The slough may form over the trochanters, over the sacrum, or wherever the tissues have been subjected to pressure for a long time, and is a consequence of impaired nutrition of the skin. Sometimes this gangrenous process not only involves the skin, but also the subjacent cellular tissue and the muscles. Gangrene of the toes and portions of the integument which are not subjected to pressure, is due either to thrombosis or embolism.

This completes the history of the anatomical lesions of typhoid fever. In connection with this history I would call your attention to something of special importance, which I wish you would be careful to remember, namely: that typhoid fever is a specific disease; that it has a specific pathological lesion, a catarrhal inflammation of the intestinal mucous membrane, attended by special follicular changes; and though you may find present in other diseases the changes which I have described as the characteristic lesion of typhoid fever, yet there is no other disease in which they have a regular development in which the different stages can be indicated with a degree of certainty by days and weeks.

Etiology.—We very naturally pass from the consideration of the morbid anatomy of typhoid fever to its etiology. According to the classification of fevers which I have adopted, it is included in the list of miasmatic-contagious fevers. Usually, it has been regarded as an endemic form of disease. There seems to be no connection between its development and destitution; for not only does it choose its vic-

tims from the hovels of the poor, but from the dwellings of the middle classes, and from the palaces of the rich. It may occur as an isolated case, or whole households and neighborhoods may be stricken down with this disease. We must therefore regard the the causes of its production as local and limited, and not widespread. It is possible for it to prevail as an epidemic, but it must first have been endemic.

In studying the etiology of this fever, the prominent questions present themselves:

First.—Is it a contagious form of disease?

Second.—Is it ever of spontaneous origin?

The question of contagion is one that has been very thoroughly discussed. For many years representative medical men have differed upon this point. After years of careful investigation, I think it may be now unhesitatingly stated that facts do not sustain the opinion that typhoid fever is ever, strictly speaking, a contagious disease, or that it is ever directly transmitted from one individual to another.

Persons sick with this fever are now admitted into our general hospitals, and are placed in beds by the side of patients sick with pneumonia or any form of chronic disease, without endangering the lives of such patients. This fact shows how generally the profession regard this disease as non-contagious. Typhoid fever is no longer restricted by quarantine regulations. All these facts tend to dispose of the question, is it a contagious disease?

The question, is typhoid fever of spontaneous origin? has also been thoroughly discussed, and there are strong advocates on both sides of the question.

Some of those who believe that it may have a spontaneous origin maintain that the poison which gives rise to it is developed by the decomposition of organic matter, and that the specific character of the fever is due to the particular substances which arise undergoing decomposition. Others maintain that the decomposing substance is mainly human excrement, in other words, that decomposing human excrement is necessary for the production of the peculiar poison which gives rise to typhoid fever. Again, others who believe that the disease is of spontaneous origin maintain that the presence of vegetable matter in certain conditions is necessary for its production, and that these conditions are similar to those which exist when miasmatic fevers are developed, the difference in the two poisons depending rather upon the rate of temperature than upon the character of the ingredients.

There is a view only recently advanced in regard to the origin of typhoid fever, that sewer gases contain the poison which develops typhoid fever.

On the other hand, it is maintained by those who do not believe in the spontaneous origin of this fever, that in addition to decomposing animal and vegetable matter, it is necessary that the specific typhoid poison shall be incorporated in the decomposing mass. It is the leaven (if you choose so to call it) which is to leaven the whole mass. Daily observation seems to clearly prove that vegetable or animal decomposition alone is not sufficient for the development of this disease, even admitting that it depends upon the decomposition of human excrement. In how few of the many dwellings permeated with the effluvia from privies do the inmates have typhoid fever.

Again, facts do not sustain the claim of those who say that sewer gases contain the typhoid poison, for those cities in which the sewerage is most imperfect, and those houses most frequently permeated with sewer gases, are not the hotbeds of typhoid fever. Again, this fever is more prevalent in the country than in the city, in places where there are no sewer gases; indeed, well-marked cases of typhoid fever are of quite rare occurrence in the city, and when they do occur seem to be developed independent of defective sewerage. In other words, all the elements which favor its production may be present, such as animal and vegetable decomposition or sewer gases, and yet not a single case of typhoid fever be developed, until some person having typhoid fever comes within the precinct, or some substance containing the typhoid poison is brought within the boundaries favorable to its development; then a severe epidemic of the disease may be developed.

In carefully reviewing the history of the origin of this disease in the different localities in which for the first time it has suddenly appeared and prevailed, we will find that the advent of one suffering from the disease, or the introduction of matters from such a person, has been the starting-point of the epidemic; in other words, that one of these two conditions is a primary necessity for its production.

We therefore almost necessarily reach the conclusion that something is necessary for the development of typhoid poison besides favorable external conditions; that animal and vegetable decomposition does not primarily originate the poison, but furnishes a favorable soil for its growth and development.

Facts warrant us in making the statement that while on the one hand typhoid fever cannot be regarded as a strictly contagious disease, on the other hand it is not of spontaneous origin.

It is hardly necessary for me to review all the facts which have a bearing upon this subject. I believe any one who without prejudice studies them will arrive at this conclusion, that when typhoid fever makes its appearance in any locality, its development is preceded by the introduction of a specific typhus poison, which has been reproduced (in most instances) in connection with decomposing human excrement.

The question now arises, What is the real nature of that poison derived from a person sick with typhoid fever, which has the power of indefinitely reproducing itself outside of the body in connection with decomposing organic matter, and thus becomes the infecting agent, when individuals are brought within its influence?

The history of endemics of typhoid fever leads to the conclusion that the poison is contained in the fæcal discharges of the sick. When such excrement is in a fresh condition the poison is not active; it must go through a stage of development outside of the body. This may take place in the excrement itself, but it goes on more rapidly and abundantly if the excrement is collected in privies or in earth that is already saturated with organic matter. In this way you can readily explain how a typhoid fever patient coming into a locality previously free from the disease can establish there a focus of infection, from which many persons may become diseased.

It is evident that this poison is not active in its fresh state, from the fact that the disease is not carried directly from one individual to another—as, attendants, nurses and physicians are no more liable to the disease than those who in no way are exposed to the disease and live in a healthy locality. Mothers may sleep in the same bed with children who are sick with the fever without contracting the disease. As has already been stated, in order that typhoid excrement shall become effective in the transmission of the poison, it is necessary it should go through a stage of development in connection with organic matter outside of the body; so it travels from the diseased individual to the localities which are favorable to its

development, and again from these localities into the human body.

It is difficult to determine the period of incubation, or length of time the poison must remain in the body before symptoms of the disease are manifest. The history of isolated cases would lead to the conclusion that the period varies from fourteen to twenty days.

The next question that arises is, How does the typhoid poison gain admission to the human body? Undoubtedly there are two principal sources of infection, namely, the air we breathe and the water we drink. A large number of well authenticated histories have now established the fact, that this fever may be developed by gases which emanate from privies, sewers, etc., which have been the receptacle of excrement from typhoid patients, and also, by drinking water from springs and wells which have become contaminated by matters from adjoining privies and cesspools. It is also now an accepted belief, or rather is regarded as an established fact, that water remains contaminated, though far remote from the point where it came in contact with a defective sewer or water closet.

Soil pipes and sewerage may be defective for a long time, perhaps a year, or even longer, and no case of typhoid fever occur, when suddenly an endemic of typhoid fever breaks out, and careful investigation shows that its development was preceded by the introduction of the excrement of a single individual sick with the disease.

It is the belief of some that milk can convey the typhoid poison, and there is evidence in favor of this opinion; but I think there is stronger evidence that the water in the milk and not the milk itself, is the medium through which the poison is transmitted.

This poison has great vitality. Typhoid fever frequently occurs in the same locality year after year, when the surrounding conditions are favorable to its development. Those conditions which favor its development are more frequently present in the autumn than at any other season of the year, and for this reason it has been called Autumnal fever.

Usually it makes its appearance in a locality, year after year, at about the same time; case after case is developed until entire households and neighborhoods become its victims. Individuals who come to care for the sick may contract the disease, and even persons who visit houses in which the disease is prevailing may afterwards develop the fever, contracting it, not from the sick, but from the infected atmosphere of the locality.

Age must be regarded as a predisposing cause of typhoid fever. It is much more likely to occur in young than in old persons; it occurs most frequently between the ages of fifteen and twenty-five, and is rarely met with in persons over fifty.

There are also individual idiosyncrasies which seem to predispose to this fever. Some contract it upon the slightest exposure to the influence of the poison, while others, frequently brought in contact with it through long endemics, escape. Again, an individual may have repeated attacks of typhoid fever. I have in mind a physician who had typhoid fever four times, the last attack proving fatal. A person who has had typhus or scarlet fever is not likely to have a second attack, but no such immunity follows an attack of typhoid fever. Whatever view we take of the exact nature of the typhoid poison, it has been quite conclusively demonstrated that the typhoid poison differs very essentially from that of other fevers.

From this brief review of the etiology of this fever, we are led to the following conclusions:

First.—That its development is independent of over-crowding, and that it attacks the rich and poor indiscriminately.

Second.—That it may be communicated from one person to another through the excrements which have undergone decomposition after their discharge.

Third.—That an endemic of typhoid fever only occurs where the air or drinking water of the locality has become poisoned by emanations from typhoid excrements which have undergone decomposition, and that, if the fever becomes epidemic, it is a circumscribed epidemic, and not widespread.

Fourth.—That the exact nature of the typhoid-fever poison is still unknown.

Original Communications.

NEW FACTS AND SUGGESTIONS RELATING TO HAY FEVER.

By GEORGE M. BEARD, M.D.

During the past vacation I spent some time in Bethlehem, N. H., where I saw and studied, in greater or less detail, about one hundred cases of hay fever. In the White Mountain region—including Bethlehem, Whitefield, Lancaster, Jefferson, Twin Mountain House, Fabyan House, Crawford House, Glen House, Gorham, and Bethel—there are probably five hundred hay fever refugees, most of whom stay there during the month of September. At the meeting of the U. S. Hay Fever Association there were not far from two hundred victims of the later form of the malady, or "autumnal catarrh." The chance for the careful study of this interesting disease offered in the White Mountain region at this season has no precedent in history, and I am surprised that it is not better improved by physicians. Hay fever is a malady interesting not only in itself, but its successful study requires a knowledge of many other branches of medical and other sciences, and is one of the best means of mental discipline that I know of. In regard to the general nature and philosophy of hay fever, the observations at the White Mountains added little to what I have already published in my work on the subject, but some minor details were learned that seem to be of considerable interest.

1. *The Proportion of Cases that are benefited by a Visit to the White Mountains.*—Only a small percentage of cases obtain entire relief, while nearly all—probably nine out of ten—obtain some relief. In about four cases of every five, the relief is of a very decided character. The majority of the cases have some of the symptoms off and on during their stay, but in a modified form, and the relief is a great gain, and fully pays them for their exile from home.

The chances of relief appear to be three or four times greater than at any of our sea-side resorts. Different places act differently with different cases and in different years. In some cases the relief is immediate, in others gradual. Those who come in the latter class sometimes get disheartened on arriving at their destination; their symptoms hang on for a few days perhaps, and in despair they go to some other town in the White Mountain region, perhaps but a few miles away, and soon recover. They judge that the place last visited is better than the first one. This conclusion is oftentimes a mistaken one; they

might have been relieved if they had stayed where they first came.

2. *Other Places of Relief.*—Next to the White Mountains, I would rank the Adirondacks, and in the western country Marquette and Mackinaw. The Catskills are uncertain for the average, but for some cases answer very well.

There seems to be no island on our coast sufficiently far from land, and sufficiently barren to be a trustworthy resort for all, or even for the majority of cases. Land breezes are sure to bring distress.

While at Bethlehem, a young man was brought from Block Island, in terrible distress from hay fever. He had been made worse there. One gentleman, who had had the hay fever almost everywhere in Europe and America, said that he never suffered more than on Nantucket. Martha's Vineyard relieves some; so also do the Isles of Shoals and Fire Island; but if one must leave home, it is better to go to a place where there are three chances out of four of being greatly relieved, than to places where the chances of such relief are but one out of four.

A sea voyage is sure to relieve, and almost always speedily. I have record of but one case where the symptoms lasted long after embarkation.

Travel in Europe usually gives exemption, but not in every case. One gentleman told me that he had the later form of hay fever in St. Petersburg, in Vienna, and in Liverpool. Several have had it slightly in Paris.

3. *Why Relief Regions relieve.*—To answer this question, I must briefly explain the philosophy of hay fever. For the past half century and more, physicians, and scientists, and sufferers have been looking for an *objective* cause of this disorder. They have studied hay, and grass, and flowers, and fruit, and the pollen of ragweed and corn, sunlight, and dust of every form, and when *any one* of these substances has been found to excite the symptoms in *any single case*, straightway the problem has been believed to be solved. An excellent illustration of this one-sided method of studying disease is found in the monograph of Blackley, of England, who, by a series of careful and admirably carried out observations, proved, what was well known before, that the pollen of certain grasses may in some cases excite the paroxysms, and hence concluded that in this single and simple fact was the whole philosophy of the disease, and that it should be called "pollen catarrh." Consistently with this line of reasoning and the habit of looking at one side rather than all sides of a complex subject, observers in this country have proved that ragweed and the pollen of corn excite the paroxysms, and term the disease "ragweed fever." Others find that the paroxysms are excited by peaches, and call it "peach cold;" others still by snow, and call it "snow cold."

All of these observers are right and all are wrong. In reality hay fever, whenever and wherever occurring, is a *subjective* disease; it is from within, not from without, and all these excitants, whose name is infinity, are but what friction is to a match. The tendency to the disease is a nervous one, and is innate; no disease is more hereditary than this. I have statistics of fifty-four cases in twelve families. I have notes of twenty-five cases, that had the disease from infancy. In Newport there is a man who has it, whose father and grandfather also were sufferers; at Bethlehem I presented to the Association a child, five months old, with all the symptoms of hay fever, inherited from its mother.

Carrying out the illustration of lighting a match, we may say that the tendency to hay fever may remain latent for a long lifetime, until, under the irritation of some excitant, it suddenly blazes forth. Thus at Bethlehem there was a man who was first attacked at the age of sixty, on removing from the West to Rhode Island; and another case of a man whose first attack was on exposure to ragweed and tomatoes at the age of sixty-five. A father and a son were first attacked at *the same time* while on a visit at a certain place in New Hampshire; thus demonstrating the relation of the latent tendency to the exciting causes, and also the hereditary character of the malady. All of these exciting causes, dust, hay, dried and fresh, pollen of all kinds, sunlight, gaslight, foul air, smoke, cinders, mental influence, peaches, strawberries, ipecac, etc., etc., our ancestors in the last century were exposed to as much as we now are; but they did not in them excite hay fever in any of its forms; and even now not more than one out of five hundred or a thousand of our population are affected. *None of these excitants can produce hay fever unless they find the nervous system prepared for them.*

Regions like the White Mountains, give relief for these reasons:

1. *Coolness of the Air.*—Heat is one of the most important of the many exciting causes; for this reason, as well as for the greater prevalence of vegetable irritants, hay fever is more common and more persistent in the summer than in the winter.

2. *Dryness of the Air.*—Moist air, as we all know, is more oppressive than dry air at the same temperature, as is well shown in a comparison of the Turkish and Russian baths. Then, again, moisture in the atmosphere holds in solution and mechanically sustains various irritants more than dry air. I suspect that dust, when raised, does not remain in the air in that region as in other districts.

3. *Comparative Freedom from some of the worst Vegetable Irritants.*—Ragweed* does not grow in these regions to any great extent; and there is no great amount of corn, and for miles and miles in every direction extend immense forests.† Mr. Blackley has shown that pollen can be carried for long distances and at great heights in the air. Therefore a very large forest anywhere should be a good refuge for hay fever sufferers. Hay and flowers are raised in the White Mountains, and those who visit that region for the early form, or rose cold, may be disturbed thereby. "Golden-rod" also abounds in the mountains, and now and then a patient is annoyed by it. But of all the excitants dust is the most universal, and this summer being dry, has been a hard one for the sufferers who have been obliged to forego the pleasure of riding out. The general *tonic* effects of mountain air—the result of the coolness, the dryness, the rarification and diminished oxidation, as well as of the ozone and electricity—are also of value in hay fever.

Europe relieves the majority of American sufferers, partly because our "dog days"—a powerful exciting cause—are not known there, and partly from the absence of "ragweed" or corn.

The ocean air always relieves, because it is always cool, bracing, and sedative, and is entirely free from vegetable irritants and dust.

"Exempt" is, I am persuaded, too strong a word to apply to the White Mountain district, Adirondacks, Marquette, etc.; for hay fever may persist even after visiting those sections. There is also evidence that in

* Otherwise called "black weed," "Roman wormwood," *ambrosia artemisiæfolia*, and "sneeze weed."

† The vegetable irritants that are most likely to excite hay fever symptoms are not found in forests, but accompany cultivation.

the White Mountains, even in the heart of the so-called "exempt" region, hay fever may be rarely indigenous. Two indigenous cases are reported to me at Bethlehem, but I have not yet fully investigated them.

Elevation alone does not bring even relief. At Idaho Springs, Colorado, seven thousand feet above the level of the sea, there is a man who has suffered every year for ten years. In that region, alkali dust appeared to be an exciting cause. So far as I can learn there is no part of the country, except California, that is free from hay fever, although it is less common South than North.

4. *Winter Forms of Hay Fever.* — I have elsewhere shown that hay fever may arise at any season of the year, and is not at all peculiar to summer or autumn, although it is more frequent or more persistent at these seasons, partly on account of the heat, and partly on account of the greater abundance of vegetable and other irritants in the air.

A number of cases have been reported to me, in which the symptoms are brought on by the presence of *snow on the ground*, or by melting snow, or by cold winter winds. I saw a number of cases of this kind at the White Mountains. One lady, a pitiable sufferer from the later form of hay fever, told me that one winter evening, on riding a short distance over the snow, all the characteristic symptoms came upon her. In cases of this kind, the peculiar cold of the snow must act as an irritation. Melting snow is quite a common excitant. Snow in its various relations is so frequent an excitant in the winter, that the term "snow fever" might be used as appropriately as "hay fever," or "rose cold," or "peach cold."

One sufferer, a country physician, tells me that he cannot curry his horse at any season of the year without exciting the paroxysms. A young lady declares that a breath of air at any time may start the symptoms. A young lady, sixteen years of age, cannot stroke a cat in her lap without suffering; her father, whom I know well, is a hay-fever victim. One lady, who every autumn has the "catarrh," never gets fully well before April. Hay fever, therefore, must be regarded as a disease that exists all the year round; and on the nerve theory it ought to do so. In one of my cases the *first* attack was in winter, being excited by the presence of some flowers.

5. *New Symptoms.*—In regard to the symptomatology of hay fever, it would seem that little could be added to what is already known. In my work a case is noted in which there are no nasal symptoms, but instead a painful eruption (probably eczema) on the face, coming on regularly at the hay fever period. The late Dr. Wm. C. Roberts speaks of coldness at the end of the nose as one of his symptoms. A reviewer in the New York *Sun* mentions pain in the back of the neck and head as a part of his personal experience. At Bethlehem I saw a lady who usually has the asthma badly, but this season is troubled with what appears to be spasm of the œsophagus, making it difficult to swallow. Another case of like character was reported to me, but I did not see it.

I have already shown that Dr. Wyman is in error in making any distinction between the symptoms of the different forms of hay fever. The symptoms of one form are the symptoms of all forms, asthma included.

6. *Mental Influence.*—All diseases—acute and chronic, functional and organic—are more or less under the influence of the mind. There is no question that the symptoms of hay fever are to a degree subject to mental influence. Whether the malady can be excited by psychical contagion purely, is doubtful. There is as yet no evidence that the congregating of large numbers at the mountains is in any way injurious, although it may be so in some cases. The popular belief that the disease spreads because it is fashionable, because, so to speak, it "is the thing" to have it, is certainly a mistaken one. Hay fever increases as a necessary result of the operation of the law of inheritance, and on account of the increasing nervousness of the American people. It increases for the same reason that neuralgia increases.

It is possible, and indeed probable, that in some cases the exact periodicity of the attacks may be in part the result of expectation; but it is a great error to suppose that they appear as the sole result of this influence.

7. *Exciting Causes of the First Attack.*—Under this head several facts have been obtained. A lady was first attacked at the age of thirty-five, after the prostration of a confinement; that year she had the early form, or "rose cold;" the next year and subsequently she had the later forms. A lady, now residing in Stamford, Conn., was first attacked ten years ago, while eating strawberries; the peculiar itching of the mouth came on at once. It was the month of June. She now has the later form. Her symptoms were once excited by *syringa* in the hair of a lady in the room, although she was not aware of its presence. At one time she was attacked while eating a raspberry pie; it seemed that a few strawberries had been accidentally mixed up with the raspberries.

In a young man the first attack appeared on getting his feet wet. In one case the symptoms first appeared when exposed to peaches in a garden; the patient was forty-five years old. In two cases the first attack appeared while exposed to dust, riding on a stage-coach.

8. *Effect of Long Exemption.*—Exemption from the attacks, even when absolute and prolonged for many years, does not always cure. I was told of a man who resided abroad twenty-two years, and all that time was free. On returning to New York he was attacked shortly after landing.* He became vexed, and took the next steamer to Europe. One Baltimore lady was exempt five years while residing in Cuba, but was not cured of the tendency to the disease.

Some think that the general health is improved by long exemption; this is usually the case with those who are weakened by the attacks. It should be noted, however, that all persons are not weakened by the attacks of hay fever, even though they are violent; as soon as the symptoms cease they feel as well as before. In hay fever also, as in sick headache, the attack may be preceded by perfect health.

9. *The Middle Form, or July Cold.*—The middle form of the disease is less common than the early (rose cold) or later form (autumnal catarrh); but I already have notes of over twenty cases. I discovered the existence of this form early in my researches. It may interchange with any of the other forms or run into the later; some have all three forms. I have received a letter from a man who, from the hour after his birth, has been a sufferer from the later form; this year, after reading a copy of my work, he was attacked about the middle of July. He raises the query whether the middle form appeared for the first time this year as a result of mental influence, or whether a piece of growing corn in a garden near by may have had something to do with it. These divisions into the early,

* While these notes were in course of preparation, a friend who has been three seasons in Europe called upon me. During his absence he was free; but on approaching Staten Island, as soon as the land breeze struck the steamer, the symptoms came on.

middle, and later forms—with the corresponding names, rose cold, July cold, and "autumnal catarrh"—are for convenience only; they indicate no special differences in the nature of the malady, which always and everywhere is the same thing. Hay fever may start any time between May and October, and may end any time between July and April. Brief attacks may begin and end at any season of the year. The symptoms of one form are the symptoms of all forms, the only difference being in the nature of the excitants. In this country the most common form is the later, beginning in August and ending usually in September, October, or November; next in order is the early form, beginning in May or June and ending usually in July, but sometimes running into the middle and later forms; last and least frequent of all, in the proportion of about ten to one, is the middle form, beginning in July and ending in August, or running into the later form. The division between these forms is far from being mathematical or absolute.

10. *Periodicity of the Attacks.*—Like all or nearly all other nervous diseases, hay fever, in all its leading forms, tends to be periodic; but only in a minority of the cases—about one out of five—does it always every year come on the same day. In the remaining cases the date of the attack is liable to be so far modified by circumstances as to vary all the way from a day or two to several days or weeks. Out of thirty-two cases of the later form in Bethlehem this year, six declared that the attacks came on always every year invariably the same day, but the day was different with persons. In twenty cases the time of the attack was liable to vary, but never varied more than five days. In six cases the variation was liable to be more than five days. Very rarely the attack comes on every year at precisely the same hour. In one of my cases it came on at eight o'clock in the morning. An intelligent sufferer tells me that the winter attacks come on in some cases just six months from the date of the summer attacks; but I have not investigated this claim.

11. *Natural Cure of the Disease.*—We have seen that hay fever is a disease with very long arms: it has one hand on the cradle and the other on the grave. The query whether the tendency to the disease is ever outgrown, therefore, becomes one of practical moment. Now and then the disease disappears spontaneously. A lady of Swampscott, Mass., had the later form for many years, but finally outgrew it. A case is reported to me of a lady, residing in New Jersey, who had the later form for twenty years; she took quinine in large doses, and now for several years she has been free. Cases are reported also where the early form is outgrown.

12. *Treatment and Verification of the Theory.*—Prevision, says Comte, is the test of a scientific theory. This test, the nerve theory of hay fever can endure, for not only does it account for and harmonize all the known phenomena of the disease, but it suggests new facts and arguments for its own verification, thus fulfilling apparently all the conditions requisite for a scientific hypothesis.

Guided by this theory, one can tell, from the detailed description of any locality, whether it is or is not a good relief region for hay-fever subjects, and also whether any remedy is likely to help any cases. If all the victims of hay fever were to enter upon a crusade to the north, they would in time all be delivered from their sufferings. A few would be relieved at the sea coast, others on the hill regions of our northern States; a still larger number at the White Mountains, Adirondacks, and the great lakes; those whom these latitudes and altitudes failed to help, would be mostly entirely free on arriving at Nova Scotia, and almost every case would be relieved before reaching the snows of Alaska or the icebergs of Greenland.

Under the guidance of this theory, one could assert that the malady does not exist, or is very rare among the native population of South America, Central America, the West Indies, and among savages everywhere is unknown.

This theory led me to recommend central and local galvanization for hay fever before it was known to have been of practical efficacy in this disorder. At the present time, the evidence in favor of this method of treatment is constantly accumulating. The same theory suggested Turkish baths, which are now known to act most pleasantly in certain cases; other nerve remedies, as gelsemin, calabar bean, chloral, and hypodermic injections of narcotics, are to be recommended on the same principle. The value of the *preliminary* use of quinine, arsenic, and other tonics was suggested by this theory before there had been positive proof that good had come from such treatment.

Accepting this theory, we must also logically accept the view that no general specific ever can be found for hay fever; and as cases differ as much as faces differ, no two are to be treated precisely alike. Each person must find his own specific by experimenting through the whole range of tonics and sedatives. Every man has his own hay fever, as he has his own sick headache or neuralgia. All these predictions were made in 1874, and on the strength of this hypothesis. Experience is confirming their soundness.

I have long observed that hay-fever patients, when the symptoms are upon them, become quite disheartened, and are averse to doing anything for themselves. This feeling of discouragement is indeed one of the symptoms of the disease. In this respect, hay fever is like sea-sickness. There is a positive basis for discouragement in the ill success that has attended the use of remedies, but it must be remembered that the experiments have been made in the wrong direction. The dominant belief has been that the disease is parasitic (Helmholtz) or infectious (it is so classed in Ziemssen's "Cyclopædia"), and the hope has been that some specific would be found for it—some single and powerful antidote for a single and powerful poison. Under the inspiration of this error, patients have treated themselves most cruelly by violent and painful processes. Those who have passed through this ordeal say that they have "tried everything;" in fact, they have tried nothing properly. In the treatment of hay fever, almost any sedative or tonic may be tested. This general rule should be kept in mind, always that nothing should be used so strong as to cause pain or unpleasant sensations of any kind. Treatment that is not followed by agreeable effects will not be likely to do good. There is a constant temptation with some to overdo everything that is tried, especially the local applications.

Dr. Carroll writes me that goggles are of service during an attack, partly by directly protecting the eyes, and partly, also, by preventing the reflex symptoms that may be excited by the action of irritants on these organs. Cotton worn over the eyes during railroad travel is a good protection.

For the relief of the nasal symptoms, I would recommend the following:

℞ Spts. camphor. . . . . ℥ ij.
Chloroform . . . . . ℥ v.
Carbolic acid . . . . . ℥ i.
Alcohol . . . . . ℥ iij.

Inhale from a vial.

In regard to the hygiene, it should be remembered

that the disease is one of debility and irritation, and needs strengthening, not weakening, influences—good and abundant food, and warm clothing. Flannel is to be used freely. Almost all the victims agree that they suffer less when they keep quiet in the house. Even in the mountains, riding about in dust brings on distress in many cases.

Progress of Medical Science.

Irritability in Different Parts of the Same Nerve.—To examine the irritability in different parts of the same nerve, Dr. K. Hällsten employed the following method of preparation: The two sciatic nerves of the frog were completely isolated by dissection from all the surrounding parts, but left in communication with the lumbar portion of the spinal medulla. On one of the extremities the nerve was divided in the popliteal fossa, while on the other the attachments of the gastrocnemius muscle to the trunk of the nerve, to the femur and to the tendo Achilles were left intact. All the other parts were removed. This preparation was placed in the myographion of Pflüger, with the precautions necessary to prevent injury of the nerves. The divided nerve was placed on two pairs of electrodes, one approximated to the central organ, the other towards the cut end.

The electrodes consisted either of two pairs of pins, soldered to copper wires, or of points of ordinary clay, non-polarizable (of DuBois-Reymond). By a special arrangement, the effects of unipolar induction, etc., were removed with certainty. In a series of experiments, some of which were made as early as 1872, the nerve was excited by induced currents, succeeding to very close intervals; in the others he employed the induction apparatus of Ruhmkorff, and the nerve was submitted to a single excitation, engendered by the induced current of rupture.

Whichever method was employed, it was ascertained that the reflex contractions in the muscle differed in extent when the excitation of the same force acted on the different parts of the trunk of the divided nerve. It was also demonstrated, by experiments, that an irritation of less considerable intensity was necessary to provoke reflex movements, when it was applied to a portion nearer the central organ than when more distant.

This result cannot be explained by the theory generally admitted—namely, that the impulse which is essential to the function of the nerve increases in force proportionally to the road travelled over. According to this theory, the results of the experiments would have been quite opposite, from which Dr. Hällsten concludes that the irritability of the sensitive nerves is different in the different parts. After having refuted another mode of explanation, which might appear probable, and recalled to mind several facts which prove that the specific irritability is not the same in the different parts of the nervous system, Dr. H. explains not only his observations on the sensitive nerves, but also those of Pflüger on the motor nerves, which have long been known, by this fact: *That the specific irritability of the motor nerves as well as of the sensitive nerves differs at different points, and that in general it decreases from the centre towards the periphery.*—*Nordiskt Medicinskt Arkiv.* 8de. Bandet, No. 5.

Belladonna Poisoning an Infant.—Dr. Horton reports the case of a boy, two and a half years of age, who swallowed forty-five grains of the extract of belladonna. When seen two hours later, almost every muscle of the body, especially those of the extremities, seemed to be in a spasmodic action. The skin in color, and to a certain extent in thickness, had the appearance of scarlet flannel; the teeth were tightly clinched, with a little froth flying out between them at each irregular spasm of the muscles of expiration; the eyelids were widely separated and fixed; the pupils were dilated to their utmost limit and immovable; the child was totally insensible, and the pulse could not be counted on account of the incessant muscular twitching. An emetic of sulphate of zinc was at once given, followed, after the vomiting had ceased, by two teaspoonfuls of tincture of opium in one dose, and two teaspoonfuls more in divided doses every half hour. Seven hours later the muscular twitching had partly ceased, but the eyes were still dilated. No further treatment was employed, and in a few days the child had recovered his usual good health.—*Medical and Surgical Reporter*, June 10, 1876.

Successful Treatment of Polyuria.—M. Hayem mentioned at the meeting of the Paris Biological Society, March 18th, 1876, the case of a man aged forty-eight, who had enjoyed good health up to 1867, when he suffered from a nervous attack, characterized by loss of consciousness and paralysis of the right arm. In 1874 the sight became impaired, but he was otherwise in good health until February, 1875, when he became affected with polyuria, polyphagia, and polydipsia, and soon after, nocturnal incontinence of urine. When the patient was first seen by M. Hayem, the face was puffed and the lower limbs œdematous. The urine contained a certain amount of sugar but no albumen: he voided about four quarts and a half of urine, containing about two ounces of urea per diem. After a treatment of twenty-eight days the patient taking about one grain of opium per diem, the quantity of urine diminished to about three pints, and the urea to about seven drachms in the twenty-four hours. The general health was much improved. It is supposed that the opium acted as an alterative to the nervous system. In similar cases Trousseau and Bouchard succeeded with valerian.—*The Lancet*, June 17th.

Infective Substances.—Dr. Stucker, of Lower Austria, proposes to divide infective substances in accordance with their place of origin into three groups, viz.:

1. Entogenous, of which syphilis is undoubtedly an example.

2. Amphigenous, as in the case of the agents which have been thought to produce diphtheritis.

3. Ectogenous, to which all those poisons, both animal and vegetable, belong, which produce simple poisoning.

This classification has no reference to the question of communicability. Its principle is quite trustworthy, because whatever advances may subsequently be made in our knowledge, all infective substances must be included in one or other of these groups. Dr. Stucker considers it advisable to call those diseases zymotic which are capable of spontaneously multiplying their causes, and to regard infective diseases as a wider class, of which zymotic diseases are only a subdivision. The animal poisons may thus be included among the infective diseases without necessarily belonging to the zymotic.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, October 7, 1876.

THE INFLUENCE OF THE MEDICAL PROFESSION.

THE manner in which the profession is expressing its opinion upon many of the general questions bearing upon social and sanitary reforms shows that it is beginning to appreciate its legitimate relations to the public. On the other hand, the eagerness with which the press seize upon these opinions, and give them the widest possible publicity, is an evidence that they are worthy of respectful consideration.

Hitherto, as a profession, we have kept ourselves in the background regarding the discussion of questions which affect the public good, and in which, as experts, we should have taken a part. The excuse for this neglect has been the want of appreciation of such services on behalf of the people. This, however, has a foundation more apparent than real. We have, however, no right to throw all the blame upon the public for ignoring the value of suggestions which we have been inclined to offer it, or of efforts which we have made to give them a practical turn. The people have not properly understood our motives, and have been unable to separate what they consider class interests from what we consider the public good. It must not be denied that the efforts which the profession have made in bygone days to obtain class legislation, and to protect what it was pleased to designate professional rights, has tended to create suspicion, if not distrust, of any purely professional movement. It may take considerable time before these prejudices are entirely uprooted, some time before the profession, as a body, will pardon the wilful neglect of its former counsels; but that a proper understanding is being reached, we see the most encouraging evidences. Medical men are not so reticent as formerly, and are beginning to prove to the people that they can take an interest in necessary reforms as good citizens and as experts, entirely independent of individual or class considerations.

Far from degrading itself in the eyes of the people, the profession is rising to the becoming dignity of a learned and liberal body. Its opinions are received with flattering eagerness, and are commanding deserved respect. As a body, we are taking rank with the leaders of public opinion upon every subject concerning which we are qualified to speak. In consideration of these facts it is easy to see that our influence must increase in proportion as we use the opportunities which are offered to us. The circumstances of advancing civilization, the growing importance of the science of preventive medicine, its widespread ramifications into every social and political interest, force upon us obligations which no code of ethics can ignore, and the discharge of which no false idea of professional modesty should prevent. That we are becoming equal to the emergency is one of the most promising signs of the future.

Mr. Gladstone, the English statesman, recently gave it as his opinion that, in comparison with other professions, ours is destined to become increasingly important and influential. This is an opinion which is held, not by him alone, but by public men in this and other countries; and if we can judge of the tone of the public press, and the high regard which it has of professional services in state medicine, as indicating popular sentiment, we are warranted in assuming that the opinion is well founded.

The past few months have been signalized by the meetings of associations of almost every sort; and in all of these, where the voice of the medical profession has been entitled to a hearing, the opportunities for extending its influence have not been lost. Leaving out of consideration the societies which are strictly medical in character, and in which public questions were occasionally discussed, we turn to those which are more general in scope and more strictly associated with political and social reforms. In these the medical man has made himself a prominent advocate of advanced ideas, a strenuous supporter of radical reforms, and a judicious leader of public sentiment.

The papers upon the nature and treatment of lunacy, inebriety, prostitution and kindred topics, read before secular bodies, have been of the highest order of merit; and, while they prove the fitness of the writers to handle the subjects, reflect credit upon the profession in the name of which they speak. This is as it should be, and must ere long bear its legitimate fruits in awakening public attention in hastening the enforcement of the necessary remedies.

In the meantime let us be patient and labor on. Not to make an invidious comparison with the work in other associations, we cannot refrain from a special allusion to the discussion of the school question before the Social Science Association, at its recent meeting in Saratoga. In this we have a typical illustration of the direction in which medical influence can be exerted with the greatest benefit to all concerned. To the profession is due almost all the credit which may come

from the agitation of the questions bearing upon school hygiene; and that influence is being created in high places is another evidence of the power of professional opinion and the force of professional character. In the reports of this Association, published by the daily press, side by side with elaborate papers on civil service reform, the money and labor question, we have full abstracts of papers on near-sightedness and deafness in school children, on contagious diseases in schools, on school architecture, drainage, etc. Here, too, is an illustration of the necessity of leaving the discussion of one of the most important reforms of the age almost entirely in the hands of the medical profession. The manner in which they have treated the subject from the beginning shows that they are in earnest in their laudable efforts. The principles upon which these reforms must be founded are well enough understood by the profession at large; it only needs to convince the public of their necessity to have the remedies applied. It will not serve our present purpose, then, to refer in detail to the measures proposed; but we cannot refrain from expressing our hearty commendation of the manner in which the different subjects were presented by those gentlemen who took part in the discussion. Notably among these were Drs. O'Sullivan and Loring, of New York; D. F. Lincoln, Edes, Bowditch, Blake, and Nichols, of Boston; Spalding, of Maine, and Hewitt, of Providence.

Reports of Societies.

AMERICAN GYNECOLOGICAL SOCIETY.

FIRST ANNUAL MEETING.

WEDNESDAY, SEPTEMBER 13.—FIRST DAY.—MORNING SESSION.

THE American Gynecological Society convened in the city of New York Sept. 13, 1876, and was called to order at 10 A.M. by the President, DR. FORDYCE BARKER.

DR. T. G. THOMAS, Chairman of the Committee of Arrangements, gave the guests, and the members, who had honored the Society with their presence, a most cordial welcome, and moved that Dr. Robert Barnes be invited to take a seat upon the platform.

The following gentlemen were received as members by invitation: Drs. Trenholme, of Montreal; Hadden, of Toronto; Tagliaporo, of Georgia; Rosebrugh, of Hamilton, Canada; and Reamy, of Cincinnati.

The first paper for the session was read by DR. T. ADDIS EMMET, of New York,

ON INCISION OF THE CERVIX UTERI.

In this paper was given an analysis of 345 cases of different forms of flexures treated in Dr. Emmet's private hospital, and the tabulated statistics made from observations upon 2,447 cases suffering from various diseases and injuries peculiar to women.

Dr. Emmet recognized two classes of cases: First, where the flexure was congenital and situated at or below the vaginal junction. Dysmenorrhœa, if present, was present at the beginning of the flow, but was relieved as soon as the flow was established, because of the straightening of the cervix in consequence of the menstrual congestion, and for the relief of this flexure he divided the posterior lip backward, in the median line, with a pair of scissors. The operation was attended with but little danger if the patient was properly cared for, from the fact that the organ was otherwise in a comparatively healthy condition. Second, where the flexure was in the body of the uterus, either anteversion or retroversion, and was developed subsequent to puberty. Dysmenorrhœa was present all through the flow, for the obstruction became exaggerated by the menstrual congestion. That was due to the fact that the disease was confined chiefly to one side of the organ, and the circulation was comparatively free on the opposite side. In the second class of cases, if the flexure had long existed, the tissues, at the point of greatest constriction, gradually underwent fatty degeneration from pressure, and absorption occurred, causing a permanent deformity, as after caries of the spine. When a case of that variety was met, after careful treatment had been instituted and a point reached at which all tenderness on pressure had been removed, and not until then, it was often judicious to divide the cervix backward, and to incise forward the seat of flexure above, sufficiently to open the canal. To operate early in the second class of cases, before the patient was cured, that is, before the congestion and inflammation were removed, was regarded as malpractice.

THE PRESIDENT remarked that the paper before the Society embraced new pathological views which should be carefully scrutinized, and to that end he hoped the discussion would be frank, bold, and decided, and free from all personalities. It had been expected that Dr. Sims, of New York, would be present, as he had indicated his intention of so doing in a letter sent to the President; but, it was to be regretted, he was absent.

DR. E. R. PEASLEE, of New York, then opened the discussion by saying that he accepted every word Dr. Emmet had said, as far as it was practical; the statistics, as a matter of course, should be accepted. He was glad to have the opportunity to make that statement, for he had been misunderstood by many with regard to his ideas upon this subject that had been expressed in a paper read before the New York Academy of Medicine early in the summer.

Dr. Peaslee then read from his paper, of which an abstract was published in THE RECORD for July 24, 1876, what he had stated with reference to posterior discision of the cervix uteri, bilateral discission, and the superficial incision, and disputed the assertion that he had made claims to priority for the latter. He had brought the superficial incision prominently before the profession, but had not intended to make any imperious claim upon it. The doctor further remarked that he had been told Dr. Sims would be present, and would annihilate the paper which he had read, and he had invited some of his friends to be present as mourners upon the occasion, but he was sorry to learn that Dr. S. was not to be present. He wished the fullest criticism of his paper, for he was entirely above all personal considerations in the matter.

THE PRESIDENT then introduced DR. ROBERT BARNES, of London, who, after thanking the Society for the cordial greeting which it had given him, remarked with regard to many cases of retroversion becoming cases of retroflexion about the time of puberty, as mentioned in Dr. Emmet's paper, that it was a difficult matter to determine, as we did not have the

opportunity to examine the patient so that we might know what the precise condition was. He was satisfied, however, that many of the cases were congenital, but at what time they began to develop the form of displacement present when examined, he was unable to say, and could hardly understand how they should begin as cases of retroversion. Dr. Barnes was of the opinion that we could practically disregard the idea of stenosis of the os internum, for he had never met with a case in which the sound could not be passed through that opening. It might be narrowed by flexure, but then it was not cured by incision, and such operation under those circumstances was unnecessary. He regarded incision as a dangerous operation. In a great majority of cases dysmenorrhœa could be relieved by enlarging the os externum simply, and if flexure was present to some extent it became relieved by the same operation. The incision in such cases need not be large, and could be most conveniently made by means of scissors. In some cases it might be necessary to repeat the operation. The patient required preparation, and should remain in bed for a week after it had been performed. Even with the modified form of operation he had three fatal cases.

Dr. J. P. White, of Buffalo, remarked that if called upon to adopt either Simpson's, Sims's, or Peaslee's operation, he should adopt the latter and make the superficial incision. He was of the opinion that Dr. Emmet in his paper had given too little attention to stenosis of the cervical canal, and he believed that it might be present independent of flexure. The doctor then proceeded to make some remarks upon the treatment of narrowing of the canal of the cervix, no matter what the cause might be upon which it depended. Operative procedure was, in his opinion, the only means which would afford relief. He made the bilateral incision by preference, and perhaps a little deeper than recommended by Dr. Peaslee. He performed the operation with a small knife, perhaps no larger than a tenotomy knife, with long handle, and kept the edges of the wound separated by cotton, and subsequently by means of a dilator which he exhibited. Almost all cases of dysmenorrhœa had been immediately benefited by this procedure. He made the incision *early* in the treatment of dysmenorrhœa, and expected the cure to go on *pari passu* with the cure of the wound in those cases where there was present great systemic disturbance.

The discussion was continued by Drs. Howard and Wilson, of Baltimore; Drs. I. E. Taylor and Peaslee, of New York; Dr Smith, of Philadelphia; Dr. Byrne, of Brooklyn; Dr. Rosebrugh, of Canada, and Dr. Chadwick, of Boston.

After the appointment of the Nominating and Auditing Committees, the Society adjourned to meet at 3 P.M.

First Day.—Afternoon Session.

The Society was called to order by the President, and the following gentlemen named as invited guests: Drs. Wm. Fox, of Madison, Wis.; G. E. Sussdorff, of Macon, Georgia; Charles Shepard, of Grand Rapids, Mich.; F. N. Evelith, of Waldoboro, Me; T. P. Seeley, of Chicago, and Dr. John T. Hodgen, of St. Louis.

The first paper for the afternoon session was read by Dr. A. J. C. Skene, of Brooklyn,

On Cicatrices of the Cervix Uteri and Vagina.

In this paper Dr. Skene considered in a brief and concise manner the causes, symptoms, and physical signs to which such cicatrices might give rise, and then studied the treatment under two heads: first, guarding against their formation; second, the treatment direct for the relief of the condition present.

Under the first head it was maintained that lacerations should be immediately brought together by sutures. When it became necessary to apply caustics, a portion of the mucous membrane should be left untouched, if possible, so that the eschar would not completely circumscribe the canal.

The indications under the latter head were to relieve pain, prevent contraction, and when deformities existed to correct them. Those requirements could be best fulfilled by complete removal of the cicatrix; but that was not always practicable, however, and should never be undertaken in cases where the scar was attached to the subjacent tissues. Shortening of the cicatrix could be prevented by cutting it in one or more places, and then using a tampon or pessary to keep the edges of the woand separated. When it surrounded the os externum, it should be divided upon two sides, and a sea-tangle tent worn during the process of healing.

The frequent use of the sound might answer the same purpose. The elm-bark tampon was highly recommended, and it was thought that the normal parts of the vagina could be enlarged, so as to compensate, to some extent at least, for the loss of room occasioned by the contraction of the cicatrix. For the relief of the pain and tenderness, the incision sometimes gave immense relief. Tr. opii, aconite, and iodine combined was recommended to soften the cicatrix. The doctor then related cases illustrative of the statements made in his paper.

Dr. Trenholme, of Montreal, commended the principle of continued pressure with slight incisions in the treatment of this class of cases, and furthermore expressed the hope that the Association would express itself somewhat strongly concerning the indiscriminate use of caustics in the treatment of diseases of women.

Dr. Byford, of Chicago, spoke very favorably of the slippery elm tampon after division of the cicatrix.

Dr. Emmet drew attention to one point which had been omitted by the author of the paper, namely, the effect upon the nervous system produced by the cicatrix. He was of the opinion that the man who succeeded best in the treatment of uterine disease was the one whose treatment was followed by the smallest amount of cicatricial tissue. For the nerves become involved in the scar, and give rise to immense trouble in the way of neuralgic pain, especially where the parts about the neck of the uterus and the urethra were affected.

Dr. E. W. Jenks, of Detroit, then read a paper

On the Uses of Viburnum Prunifolium in the Treatment of Diseases of Women.

The bark of the root should be used. A fluid extract was exhibited prepared from that portion of the plant, and was recommended in drachm doses as a uterine sedative of great service, especially in the management of cases of threatened abortion. It was regarded as serviceable in the treatment of all uterine diseases characterized by loss of blood, such as menorrhagia, metrorrhagia, etc.; and also in the treatment of nearly all forms of dysmenorrhœa. It was considered as being insufficiently sedative to relieve spasmodic and neuralgic dysmenorrhœa.

Dr. Bates, of New York, remarked that he had used the drug to a certain extent, and that it certainly had power to prevent abortion, especially in those

instances where the accident had become habitual. He thought its action was tonic and sedative.

Dr. White, of Buffalo, was unable to see how any uterine sedative could arrest the changes which took place in the ovum, and upon which the great majority of abortions depended. Still he suggested that it be thoroughly tested by the profession, for at present we had no uterine sedative among our commonly employed therapeutical agents.

Dr. Jenks, in response to several inquiries, remarked that he had used the drug somewhat empirically, had no theory concerning its physiological action, and that he would not hesitate to substitute it for opium.

Dr. Joseph A. Eve was named as an invited guest, and invited to a seat upon the platform.

Dr. T. Parvin, of Indianapolis, reported a case of

ABNORMAL MENSTRUATION,

in which there was an oozing of blood every twenty-eight days from the lower lip and gums, and continued for five or six days. The hemorrhage was mostly from the gums.

The last paper for the afternoon session was one from Dr. Storer, of Boston.

ON THE IMPORTANCE OF THE UTERINE EBB AS A FACTOR IN UTERINE SURGERY.

Dr. Storer believed that there was an ebb and flow in the female body especially, which occurred regularly like the tides, or day and night, and which should be observed carefully if the operator would have the greatest possible success attend his operations. He had performed serious surgical operations upon the pelvic organs during the catamenial flow, and with success. But, all things being equal, pelvic operations should be performed about one week after the menstrual period had ceased, or at a period corresponding to that time in cases where the catamenial discharge was not present.

Dr. Campbell, of Georgia, remarked that he fully endorsed the principle set forth in Dr. Storer's paper, and that he had acted in accordance with it from the beginning of his gynecological operations. Whether the operation was upon the uterus, vagina, or even for the removal of hæmorrhoids, he had been accustomed to perform it about a week subsequent to the cessation of the catamenial discharge.

The Society then adjourned to meet at 10 A.M., September 14.

THURSDAY, SEPTEMBER 14.—SECOND DAY.—MORNING SESSION.

The hour of 10 A.M. having arrived, the Society was called to order by the President, and the reception of two communications announced, which were read by the Secretary.

On motion, it was decided to comply with the request embodied in each, as far as possible, and with respect to Dr. Dalton's communication, it was moved to extend to him the invitation that he should make his report to this Association at its next annual meeting. The communication related to the corpus luteum.

The following gentlemen were elected members by invitation: Drs. Ira Russell, of Massachusetts; Ward, of Alabama, and B. B. Brown, of Baltimore.

Dr. Byford, Vice-President, was called to the chair.

The President's address being next in order, Dr. Barker delivered an interesting and valuable address, which was listened to throughout with the closest attention. The character and ability of the papers, which were to give the proper status to the Society, were carefully referred to, and a high-toned position taken relative to the discussions to which they might give rise. The doctor argued in favor of demanding papers of the highest order from candidates for admission, and believed that, when conducted with care and in the proper spirit, the most valuable discussions were oral.

A comparison between the period at which this Society started and that which the year commemorated was then instituted, and in it was clearly brought out the progress which the science and art of medicine has made within one hundred years, as especially pertaining to the department of obstetrics and gynecology. "Yet," said the speaker, "no definite future has been obtained; no man can rely upon his present achievements."

In conclusion, the hope was expressed that the Society might prove itself one which should command the respect and approval of the highest and most cultivated judgment of the scientific world, and not incur the reproach which Job in his bitterness uttered, "Ye are all physicians of no value."

On motion of Dr. Chadwick, of Boston, a vote of thanks was tendered the President for his most excellent address.

Dr. Robert Barnes, of London, was next introduced, and read a paper

ON SOME OF THE RELATIONS OF PREGNANCY TO GENERAL PATHOLOGY.

The name of the reader was sufficient to secure for him the closest attention, while bringing out interesting points by a comprehensive consideration of the general influence of pregnancy upon the female organism.

The influence of menstruation, ovulation, and many other conditions upon the general economy had been carefully studied, but they had been considered in too detached portions. For example, if the study of albuminuria or Bright's disease was limited to those cases occurring in men, or in women outside of pregnancy, we should be of the opinion that organic change in the structure of the kidney was an essential condition to the development of the disease. The condition of pregnancy threw an entirely new flood of light upon that interesting but serious affection.

From that point Dr. Barnes proceeded to study the chemical change in the constitution of the blood which occurred during pregnancy, together with the change in the dynamics of the circulation. The changes in the glandular system were referred to, notably those taking place in the thyroid, spleen, liver, kidney, etc.

Light might be thrown upon diseases of the eye by studying them in connection with pregnancy, and a form of amaurosis associated with that condition was mentioned, and from which recovery took place.

The changes in the function of respiration in pregnancy were referred to, and the influence which carbonic acid gas had in producing abortion was considered at some length. There was no evidence that the disturbances in the skin could produce the same result, but it was maintained that defective action of this great glandular surface might increase the defective action of the liver, kidneys, and lungs.

The influence of pregnancy in favoring coagulation of the blood was considered, and the three factors found which predisposed to the formation of thrombi; namely, some degree of arrest in its movement, the peculiar condition of the blood, and the introduction of some foreign material that favored the precipitation of fibrin.

Hemorrhages occurring in pregnancy might evidence a high arterial tension, and in many cases be a salutary measure. Could we, by means of the sphygmograph, or any other instrument, tell when arterial tension was rising too high, should we not undertake the removal of the pressure by drawing a small amount of blood; or at least increase the watery secretion from the bowels by means of hydragogue cathartics?

The paper was replete with suggestions, but our space does not permit a more extended abstract.

On motion made by DR. PEASLEE, a vote of thanks was extended to Dr. Barnes for his able paper.

THE PRESIDENT remarked that the paper was so suggestive in all directions in connection with general practical pathology, it certainly must be difficult to discuss it; yet he would call upon Dr. Peaslee, who was so distinguished a physiologist before he came to be so eminent a gynecologist, to open the discussion.

DR. PEASLEE remarked, with regard to the main proposition of the paper, that very much could be learned in general pathology from a careful study of special pathological conditions which accompanied and were brought about by utero-gestation. For, in that condition, everything was subordinated to the development of the uterus on the one hand, and its contents on the other. Every function of the body was modified, and most of the suggestions made by Dr. Barnes we were compelled to acknowledge as true and conscientious statements. Like the saying of the poet, "They have all been felt before, but never so well expressed."

Dr. Peaslee referred to the value of the paper in another respect; namely, as bearing upon certain conditions following parturition, or, it might be, independent of that act. When sub-involution or chronic passive congestion was present, he regarded the condition as one in which there was at work, as it were, a continued pregnancy; and more or less derangement of the liver, lungs, the kidneys and stomach existed as long as either those conditions remained. As far as effects were concerned they were cases of continued pregnancy, and it was important that such factor should be recognized.

DR. W. T. LUSK, of New York, remarked that he had been especially impressed with the remarks Dr. Barnes had made concerning the influence of pregnancy upon malarial poison in the system, and related a case in which the woman had been the subject of malarial poisoning, but in whom chill after chill was developed immediately upon her subsequent pregnancy, and continued in spite of all treatment throughout utero gestation. Immediately after confinement the attacks ceased.

Dr. Lusk inquired of Dr. B. whether any experiments had been made which proved that carbonic acid gas had power of acting in an isolated manner upon any organ or organs in the body. The paper was further discussed by Drs. Richardson, of Boston, and Noeggerath, of New York.

DR. BARNES, in closing the discussion, remarked that the conditions to which Dr. Peaslee had drawn attention were very striking illustrations, and extremely valuable, because they showed that the practical gynecologist could not in any pure sense be a specialist. He must extend his observations to the general system as well as direct attention to the organ at fault. True specialists were those who attended to diseases of the nervous system, liver, etc., and neglected the uterus. The true gynecologists were the "all around" practitioners. The case cited by Dr. Lusk illustrated the statement already made that it was hardly worth while to treat many conditions occurring in pregnancy as long as the pregnancy continued; and when that condition had passed most of the derangements would have disappeared. Dr. Barnes, in answer to the question asked by Dr. Lusk, referred to a number of instances where abortion had followed the inhalation of poisonous quantities of carbonic acid gas, facts which seemed to show that it had a distinct effect upon the gravid uterus. It was also a well-established fact that carbonic acid gas stimulated the action of inorganic muscular fibre.

The next paper was read by DR. BYFORD, of Chicago,

ON THE SPONTANEOUS AND ARTIFICIAL DISINTEGRATION OF FIBROUS TUMORS OF THE UTERUS.

The history of three cases was related. The disintegration in two of them was believed to be due to the influence of ergot.

In a majority of cases the drug could be tolerated by the stomach and might be administered in twenty or thirty drop doses twice or three or four times a day, and continued for a year, without producing any toxic effects. Sometimes a few doses only were necessary to effect all that was desired.

Dr. S. S. Purple, President of the New York Academy of Medicine, was made a member by invitation.

The Society then adjourned until 3 P.M.

SECOND DAY.—AFTERNOON SESSION.

The Society was called to order by the President, and the first paper read by DR. T. G. THOMAS, of New York,

ON ABDOMINAL PREGNANCY TREATED BY GASTROTOMY.

The paper contained the report of a case with comments, and the following points were noted. Early diagnosis was made important, and prompt surgical interference recommended, not uniformly, but in certain cases non-interference would be criminal. No positive rule could be laid down. In the present instance fluid from the sac was submitted to an excellent microscopist, who declared that it contained what he believed to be the ovarian corpuscle. The placenta was left *in situ*; the external wound was kept open by a drainage tube; the sac was washed out with antiseptic injections, as symptoms of septicæmia were developed on the fourteenth day; and in the fifth week the placenta, partially decomposed, appeared at the opening and was removed. The child was well developed, but its death had been caused by a hair tightly encircling the funis and cutting off all circulation.

When the peritoneum was reached it was found so hypertrophied that had not the doctor been positive in his diagnosis he should have regarded it as a condition associated with ovarian cyst and proceeded to peel it off from the abdominal walls, and probably brought about a fatal result.

DR. BYFORD, Vice-President, in the Chair, called upon Dr. Barnes to open the discussion. The doctor made some interesting remarks touching the difficulty of diagnosis, and believed that the diagnosis by the presence or absence of what had been called the ovarian corpuscle was unsafe. He coincided with Dr. Thomas in the view that the placenta should remain undisturbed, but he was not quite so certain that the external wound should be kept open. The propriety of opening the wound upon the first development of symptoms of septicæmia was perfectly clear.

DR. ENGELMANN, of St. Louis, thought that a differ-

ential diagnosis between ovarian cyst and other conditions could not be made by microscopical examination.

Dr. Drysdale, of Philadelphia, remarked that he had made over 1,500 examinations of fluid from the abdomen, and had not failed in a single instance, when proper care was exercised, in making a differential diagnosis between ovarian and any other form of abdominal tumor. The doctor stated briefly the tests which he commonly employed to determine the character of the cell.

Dr. Chadwick's experience had been unfavorable to the so called ovarian corpuscle as a pathognomonic cell.

Dr. Byford's experience, as far as it went, in thirty or forty instances, corroborated that given by Dr. Drysdale.

Dr. Thomas, in closing the discussion, remarked that the best microscopists of this city had failed to make a diagnosis of ovarian tumor by a microscopical examination of the fluid, and he had come to regard it as an unreliable aid. Still he did Dr. Drysdale credit by saying that the diagnosis had been correct, as proved by operation, in every instance in which he had submitted fluid to him for such examination. With regard to the propriety of leaving an opening for the escape of the placenta the question was not whether it might not be removed by nature after the opening was closed, but whether it would not be safer for the patient to leave the opening for the discharge of detritus. He regarded it as an unsafe conclusion that when septiæmia showed itself we might then make an opening.

PNEUMATIC SELF-REPLACEMENT IN DISLOCATION OF THE GRAVID AND NON-GRAVID UTERUS

was the title of a paper read by Dr. H. F. Campbell, of Georgia.

The paper was discussed at some length by Drs. Parvin, Emmet, Mundé, Smith, of Philadelphia, Chadwick, Peaslee, and Wilson.

The Society then adjourned, to meet at 10 A.M. on Friday, September 15.

Friday, September 15.—Third Day.—Morning Session.

The Society was called to order by the President, and Dr. Edward Wilson, of Philadelphia, elected member by invitation.

Dr. Byford's paper upon the spontaneous and artificial disintegration of uterine fibroids being open for discussion,—

Dr. Atlee, of Philadelphia, remarked that he should restrict what he had to say to the natural efforts of the womb to disintegrate these tumors, and thought that such disintegration was confined to the submucous variety. In such cases there was no doubt but that when the capsule became inflamed, ulcerated, and ruptured, the natural efforts of the uterus might force the tumor from its cavity into the external world. The vitality of the tumor was not great, and when exposed to the atmosphere by rupture of the capsule, it took on a species of decay, analogous to that seen in fruit, or the dry-rot in wood, which extends from one point to another, until the greater portion of the tumor might be subjected to that destructive change. When such condition was present, the tumor should be rapidly expelled or quickly removed by artificial means, for there was great danger of systemic poisoning. In the meantime, such toxic state should be guarded against by the free use of antiseptic injections. Dr. Atlee spoke of fibroids in connection with parturition, and in conclusion sustained the position taken by Dr. Byford in his paper.

Dr. Goodell, of Philadelphia, mentioned a case in which the fibroid was situated in the fundus of the uterus, the capsule was incised, ergot administered, and a large portion of the tumor thrown off in fragments.

Dr. Drysdale, of Philadelphia, called attention to the use of large doses of ergot in this connection, and stated that he had administered ℥ ss. doses of Squibb's fl. ext., t. i. d., continuously for a year without producing deleterious effects.

Dr. Emmet, of New York, was of the opinion that only when the tumor was situated so as to bring the gravity to bear in effecting its expulsion was ergot of any service as an expulsive agent.

Dr. Thomas, of New York, believed that the action of ergot in these cases was two-fold, and that the two should not be confounded. First, it unquestionably assisted the uterus in expelling the tumor, when situated so that it could be forced into the uterine cavity. Second, Hildebrandt had shown conclusively, that ergot affected the blood-vessels of an interstitial tumor, in accordance with the same law which governed its influence upon blood-vessels in other parts of the body. That action should not be overlooked, and it was by no means secondary in importance.

Dr. E. Noeggerath, of New York, then read a paper on

LATENT GONORRHŒA, ESPECIALLY WITH REGARD TO ITS INFLUENCE ON FERTILITY IN WOMEN,

in which he set forth the doctrine that gonorrhœa persisted for life in certain sections of the organs of generation, notwithstanding its apparent cure; and maintained that that fact explained to some extent the prevalence of uterine disease in large cities; why blooming girls faded so soon after marriage; why treatment of certain cases of uterine disease seemed to have no effect; why sterility was so abundant.

The paper was somewhat sharply criticised by Drs. Trenholme, of Montreal; Engelmann, of St. Louis; Chadwick, of Boston; and Johnson, of Washington.

Dr. Noeggerath replied with considerable vigor.

The Secretary then read a paper which had been received from Dr. Albert Wiltshire, of London, England, on

DEATH FROM URINÆMIA IN CERTAIN CASES OF MALIGNANT DISEASES OF THE UTERUS.

The paper was discussed by Drs. Parvin, of Indianapolis; Campbell, of Georgia; Skene, of Brooklyn; Wilson, of Baltimore, and the President.

Dr. G. J. Engelmann, of St. Louis, then presented the abstract of a paper on

MENSTRUAL HYSTERO-NEUROSIS OF THE STOMACH.

On motion, it was resolved that the Society did not hold itself responsible for any views expressed in papers that might appear in its Transactions, but that they were to be regarded simply as the views of the authors.

The Society adjourned to meet at 3 P.M.

Third Day.—Afternoon Session.

The Society was called to order by the President.

The first order of business was the reading of a paper and presentation of specimens by Dr. E. R. Peaslee, of New York, entitled

SOLID UTERUS—BOTH OVARIES REMOVED FOR THE RELIEF OF EPILEPTIC SEIZURES BELIEVED TO DEPEND UPON OVARIAN IRRITATION.

Dr. Peaslee's operation was performed through the abdominal wall. Fatal peritonitis ensued.

Dr. Trenholme, of Montreal, related two cases in which he had removed the ovaries, and recovery followed in both instances. One operation was supra-pubic and the other vaginal. The paper was further discussed by Drs. Thomas, Noeggerath, and Emmet.

Dr. Gaenslen, of Texas, was elected member by invitation.

Dr. W. Goodell, of Philadelphia, then read a paper, entitled

CLINICAL MEMOIR ON SOME OF THE GENITAL LESIONS OF CHILD BED,

in which he maintained that the condition of the woman was bettered, when laceration of the perineum occurred, by closing it at once with silver-wire sutures. He was by no means so sure what should be the course of the physician in cases of laceration of the recto vaginal septum proper. Such rupture usually escaped notice because it healed spontaneously.

Dr. Emmet favored closure with sutures as soon as possible.

Dr. Campbell favored immediate closure, especially in partial lacerations.

Dr. Wilson favored immediate closure in a majority of cases.

Dr. Skene urged immediate closure of the laceration by sutures.

Dr. Jenks remarked that he should not expect union to occur if the laceration was united at once after considerable manipulation about the parts had been necessary to effect the delivery.

Dr. Howard remarked that he had been more successful in the performance of the primary than the secondary operation.

The President was compelled to differ from the majority of opinions expressed upon the question.

The President also announced that he had received a letter from Dr. Sims, in which he stated that it was one of the great disappointments of his life that he had not been able to be present. He had not yet sailed from Europe.

The papers announced upon the programme were regarded as having been read by title, and referred to the Publication Committee. They were as follows:

Battey's Operation for the Extirpation of the Ovaries, by Dr. R. Battey, of Rome, Ga.

Hydrate of Chloral in Obstetric Practice, by Dr. W. L. Richardson, of Boston.

A Case of Labor Complicated with Four Large Uterine Fibroids and Placenta Previa; also a paper on Masturbation in Women, a report of seventeen cases treated with bromide of potash, by Dr. J. R. Chadwick, of Boston.

A paper from Lawson Tait, of England.

Case of Cystic Tumors of the Pelvis, by Dr. G. H. Bixby, of Boston.

What is the History of Calculi formed in the Bladder after Operation for Vesico-vaginal Fistulæ? by Dr. H. F. Campbell, of Augusta, Ga.

The officers of the Association for 1876 were re-elected.

The hour for adjournment having arrived, the President congratulated the Fellows upon a most auspicious inauguration of the Society, and declared it adjourned to meet at Boston in the last week of May, 1877.

Scarlet Fever propagated from Milk. Dr Buchanan, in his report on a recent outbreak of scarlet fever in South Kensington, says that the disease was apparently propagated through the agency of milk.

Correspondence.

SIMS' AND NOTT'S SPECULUM.

To the Editor of The Medical Record.

Dear Sir:—In your journal of Sept. 9th there is a cut of a combined Sims' and Nott's speculum, with a description of the instrument by Walter R Gillette, M. D., of New York, from which paper I quote as follows: "I present herewith a cut of a combined Sims' and Nott's speculum which was made at my suggestion two years ago by Dr. Leonard, of Shepard & Dudley's."

I regret that the Doctor had not used the instrument before, and am gratified that he now employs it in preference to many others. I have liked it for over *four* years, and have had one that length of time in daily use which answers in every respect to the cut and description of Dr. Gillette, even to Van Buren's curve in the Sims' blade for rectal examination. To my knowledge, there are quite a number of the same pattern of instruments, and of the same age as mine, in existence. Four years ago last February I suggested to Mr Stohlmann, of Tiemann & Co., New York, certain improvements in Nott's speculum. Mr. S. further improved the plan which I presented to him, and manufactured the instrument so well delineated and described in the Record of September 9th.

E. W. Jenks.

IS ALCOHOL A FOOD?

To the Editor of The Medical Record.

Dear Sir:—In your report of the late meeting of "The International Medical Congress," an abstract of a paper appears on "Alcohol in its Therapeutical Relations as a Food and a Medicine," by Dr. E. M. Hunt, of New Jersey, together with the following conclusions of the author, which "were ordered to be transmitted to" certain temperance organizations:

"1. Alcohol is not shown to be a definite food by any of the usual methods of chemical analysis or physiological investigation." [In order to be brief, we will not quote the remaining three conclusions, as they have no direct reference to the comments which we intend to make on the first.]

A paper like this, in which the author professes to have examined the most important researches on alcohol that were ever made, and which receives the sanction and ratification of "The World's Medical Congress," comes before us with more than ordinary gravity and authority, and hence it demands our serious consideration.

In regard to the first proposition we can only say that, aside of the false and erroneous light in which it undertakes to place alcohol, it is constructed in the most vague and unfortunate language. It is a conclusion without containing any moral, for it leaves it an open question, after all, whether alcohol is actually a food or not. For if "alcohol is not shown to be a —— food by any of the usual methods of chemical analysis or physiological investigation," it can perhaps be, or is demonstrated to be, a food by some unusual method of investigation. We have not read more of Dr. Hunt's paper than the mere abstract which is given in your journal, but if the conclusion which the author draws is in accordance and has any connection with the premises of his paper, then in every sense of jus-

tice and honor do we enter our most earnest protest against what seems to us a most ungenerous attempt at misrepresenting the views entertained on this question by the late Dr. Anstie, whose experiments and conclusions have received the attention of the Doctor, and at whose hands they are made to appear as if they were wholly demolished, and that in a single essay, too! Now, in the name of scientific medicine, we deny *in toto* that the researches of Dr. Anstie, let alone those of Dr. Binz, reference to which is also made, would lead us to believe that alcohol is not a food; and on the contrary, we most emphatically assert that alcohol is conclusively "shown to be a —— food" by his own chemical analysis and physiological investigations, which becomes very evident to every one after a candid, thorough, and intelligent perusal of his work in this direction. And the investigations of Dr. Dupré, as well as those of Drs. Thudicum, Schulinus, and Baudot, establish the same results. We do not wish to appear uncharitable in this matter, but when a body of medical men causes such a sweeping *pronunciamento*, as this was designed to be, to be heralded forth to the unprofessional public, on as important a subject as that of alcohol, then in all fairness let that body first consider whether its action is in conformity with the latest development which science can command on that question.

THOMAS J. MAYS, M.D.

UPPER LEHIGH, PA., Sept. 25, 1876.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from Sept. 24th to Sept. 30th, 1876.

VOLLUM, E. P., Surgeon. Granted leave of absence for twenty days. S. O. 199, A. G. O., Sept. 25, 1876.

BYRNE, C. C., Surgeon. Granted leave of absence for one month. S. O. 120, Dept. of Dakota, Sept. 25, 1876.

FRANTZ, J. H., Surgeon. Granted leave of absence for two months, on surgeon's certificate of disability. S. O. 195, Div. of the Atlantic, Sept. 28, 1876.

GREENLEAF, C. R., Surgeon. Leave of absence extended one month. S. O. 194, Mil. Div. of the Atlantic, Sept. 27, 1876.

WATERS, W. E., Asst. Surgeon. Granted leave of absence for four months. S. O. 201, A. G. O., Sept. 27, 1876.

DE GRAW, C. S., Asst. Surgeon. Relieved from duty at Fort Davis, Texas, to comply with orders from A. G. O. S. O. 172, Dept. of Texas, Sept. 16, 1876.

KINSMAN, J. H., Asst. Surgeon. Assigned to duty at Fort Sully, D. T. S. O. 121, Dept. of Dakota, Sept. 27, 1876.

BEDAL, S. S., Asst. Surgeon. Assigned to duty at Fort Duncan, Texas. S. O. 174, Sept. 20, 1876.

TURRILL, H. S., Asst. Surgeon. Assigned to duty as Post Surgeon at Fort Davis, Texas. S. O. 172, C. S., Dept. of Texas.

COMEGYS, E. T., Asst. Surgeon. Granted leave of absence for one month, with permission to apply for an extension of one month; and on expiration of leave assigned to duty at San Felipe, Texas.

JACKSON, DONALD, Asst. Surgeon. Died at Woodville, Ontario, Canada, on Sept. 22, 1876.

CUNINGHAM, T. A., Asst. Surgeon. Assigned to duty at Fort Stevenson, D. T. S. O. 121, C. S., Dept. of Dakota.

THE EX-EMPRESS Charlotte is reported to have confirmed dementia.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending September 30, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Sept. 23	1	28	16	0	1	27	0
Sept. 30	1	22	12	2	13	34	6

THE ENGLISH VIVISECTION BILL.—The sentiment of the profession in regard to the justice of the proposed Act is likely to be in a measure respected. Mr. Roebuck, an English statesman, in a recent reply to a toast at a dinner of the British Medical Association, struck the key-note of conservatism when he said that Parliament might have conceded to the profession the power of deciding whether experiments and the pain connected with them, were or were not necessary.

ADVERTISING FOR PRACTICE.—Some London surgeons have established Provident Dispensaries, the plan of operating which is to furnish advice and medicines in consideration of small weekly fees in advance. In order to make these enterprises pay, the proprietors boldly advertise for patients, much to the disgust of respectable practitioners.

PHOTO-MICROGRAPHS.—The well-known London house of Macmillan & Co., publishers of "The Practitioner," have undertaken the publication, in England, of "Micro-photographs in Histology," the monthly work conducted by Drs. Seiler, Hunt, and Richardson.

QUACKERY IN FRANCE.—The laws of France provide that no remedy whatever can be sold, or even used, without first being examined by a special Committee of the Faculty of Medicine, and yet quacks make fortunes in that country.

HORSE-FLESH AS AN ARTICLE OF DIET is advised by Mr. Decroix, of Lyons, when such flesh is required to be eaten raw. By such means tapeworm, so common when the flesh of the ox and sheep is taken in this manner, is prevented.

THE regular term of the Bellevue Hospital Medical College was opened on Wednesday evening, Sept. 27, 1876, by an address delivered by Prof. A. B. Crosby.

THE AUSTRIAN MEDICAL CONGRESS.—The second general congress of the Austrian profession terminated at Vienna on the 2d of August.

COMPULSORY VACCINATION.—The Scandinavian physicians, at a recent congress, strenuously advocated compulsory vaccination.

WRESTLING.—The *Dublin Med. Press and Circular* has a strong article in favor of wrestling from a gymnastic point of view.

INTERNATIONAL EXHIBITION IN AFRICA.—Africa is to have an International Exhibition, to open in February next.

MANUFACTURED BUTTER.—There is a large establishment at Marseilles for the manufacture of artificial butter.

ORTHOPÆDIC HOSPITAL OF IRELAND.—A National Orthopædic Hospital has been opened in Dublin.

Original Communications.

SALICYLATE OF SODA IN RHEUMATISM.

By A. CLARK, M.D.,

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My acquaintance with practice in the New York hospitals began in 1834. Since that time, either at home or abroad, officially or as a volunteer, I have been a very frequent visitor at one or more of these, or similar institutions. In this period of forty-four years the treatment of acute rheumatism has undergone many changes.

At first colchicum and actea racemosa, in tincture, separately or united, were generally relied on; calomel was at the same time often prescribed. After these followed quinine in full doses; then the nitrate of potash, an ounce or more daily, dissolved in a quart or more of water. The free use of lemon-juice was next tried. So far there was reason to doubt whether any of these medicines, except colchicum, aided much in the cure; in other words, whether the disease, after running a certain course, did not terminate spontaneously. The curative effects of colchicum, in full doses, during all these changes were often demonstrated, but serious accidents were occurring in its use, and the profession was searching for a safer treatment.

At length Dr. Fuller, of London, proposed and advocated the alkaline method. The carbonates, or convertible salts of soda and potash, were given in such quantity as to make the urine alkaline in two or three days. Then it really seemed as if we had found a safe and speedy remedy. There were cases that resisted it, but the greater number yielded. The pain subsided on the second, third, or fourth day, the stiffness remaining a day or two longer. This result, so far as it could be obtained, was a great gain. It has been observed that the acute inflammations of the pericardium and endocardium which attend acute articular rheumatism, are disposed to wait till the fifth day of the primary disease, or even a longer time. To cure the primary disease before the fifth day is, in a great majority of cases, to prevent the cardiac complications. It is true that in rare instances the cardiac inflammations have been the first manifestation of the rheumatic diathesis, the affection of the joints following one or more days after. It is equally true that the cardiac inflammations have followed that of the joints earlier than the fifth day. Still, the rule has an application sufficiently extended to illustrate one of the important advantages of the Fuller treatment.

Lately the claims of salicylic acid to the first place among the anti-rheumatics have been strongly urged. The following report of its use at Bellevue Hospital may help the profession to form a judgment regarding its virtues. It embraces all the cases received in my wards, from the 1st of April to the 1st of June, that could be called *acute* rheumatism—eleven in all. Short abstracts from the record of these cases have been made at my request by Dr. Kendall and his assistants, from the Hospital Case-Books. Each is full enough to show the general effects of the medicine; but as the effect of it on the temperature and pulse is not always mentioned, I can add that its influence in lowering the fever heat and diminishing the excited pulse were as marked as its power to relieve pain; apparently because it neutralized the rheumatism-poison, and removed the cause of these disturbances. In the tenth case "*no impression* was made on the disease" for eight days.

The formula used in all these cases is the following:

℞ Acid. salicylic..... ʒ iij.
Sodæ bicarbonat..... ʒ ij.
Glycerine,
Aq.....ãã ʒ ij.
M.

Of this a tablespoonful was given every two hours for the first day, and afterwards the same quantity six times a day. It is not claimed that this is a perfect salicylate of soda. It was prepared rather rudely by the house-physician, not with reference to atomic neutralizing proportions, but by adding the soda to the suspended acid till he obtained a clear solution. It may be atomically correct or it may not; it matters little, as the combination appears to have curative power. This treatment was begun by Dr. Jacobi, and followed up by me. This report does not include any of Dr. Jacobi's cases, but the house-physician informs me that his results were almost exactly parallel with those here noted. It must be added that in both classes of cases, whenever the joints were very painful, compresses, kept cool by frequent dipping in cold water, were applied to them.

Salicylic acid alone is reported to have cured rheumatism; soda alone cures it; and the formula given here might be considered a union of Fuller's with Stryker's treatment, were it not that the urine has not been noticed to be alkaline, and that the quantity usually taken, even if separated from its acid, is hardly enough to produce alkalinity.

In view of nervous symptoms, more or less alarming, that have been reported as following the use of salicylic acid in some cases; (see Dr. Caro's case, MED. RECORD a few weeks ago), it is important to state that no such results have been noticed at the hospital in those who have taken this salicylate; indeed, no unpleasant effects of any kind have been witnessed, though the quantity of the drug administered is large. I will make no comment on the cases, further than to say that in nine of the eleven the curative action of the medicine was early seen; in two this action was slow and incomplete.

CASE I.—John Clark, æt. 24; single; Ireland; waiter. Admitted April 15, 1876. One previous attack, three years ago. Present began five weeks ago, with pain in soles of feet and some swelling; malaise. Left work three weeks ago. Six days before admission, pain and swelling in knees; since in ankles, hips, elbows, shoulders; right wrist and back affected. On admission knees and ankles moderately swollen, hot and tender. Temp. 102½. Ordered the salicylate as above, with cold compresses to painful joints. April 17th, much improved; some muscular tenderness, and pain in left shoulder only remaining. No more symptoms referable to rheumatism developed, and April 26th, eleven days after admission, *discharged cured*.

This patient had a heart murmur whose connection with present attack is very doubtful.

CASE II.—Chas. Quinn, æt. 22; single; United States; kindling wood. Admitted April 19, 1876. Has had gonorrhœa twice, with rheumatism. Had an acute non specific attack six years ago, in this Hospital. On admission for present attack, suffering from pain and swelling in left knee and carpo-metacarpal joint of left thumb. Attack began with chill and sweat yesterday. Mitral systolic and aortic direct murmurs. Some pain in præcordia, no friction. Ordered usual treatment. In 24 hours improvement very marked;

no pain. On April 22d, three days after admission, discharged, very much improved. Duration of attack, four days; duration of treatment, three days; result, cure (?).

Case III.—Wm. H. Welwood; æt. 34; single; United States; horse-dealer. Admitted April 13, 1876. Several previous attacks, subacute in character, with, however, complete recovery. Present attack began eight days ago in right knee, followed soon by pain and swelling in nearly all the joints of body. Was not confined to bed. On admission, left elbow (the only joint much affected) swollen, hot and tender. Temp. 102. Heart normal. Ordered usual treatment. On following day affected joint normal, but stiffness of same joint of opposite side. No further extension or development. On April 17th, four days after admission, discharged cured. Under treatment four days.

Case IV.—H. Heneyer, æt. 30; single; United States; laborer. Admitted April 13, 1876. No history of previous rheumatic attacks. Three days before admission both ankles became swollen, hot and tender. On admission, ankles somewhat swollen and tender. No other joints involved. Temp. 102¼. Heart normal. Ordered usual treatment. On following day much better; some tenderness yet. Temperature normal. Treatment continued; improvement rapid, and on April 24th patient discharged cured. In hospital eleven days.

Case V.—E. Shultze, æt. 28; single; Germany; bartender. Admitted May 3, 1876. Father had rheumatism; died of cardiac disease. History of seven previous attacks; last in this hospital and in this division.

Present attack began six days ago in ankles; swelling, tenderness, and pain, followed by same in all joints of extremities. On admission, wrists swollen and tender, right elbow very tender, and all joints and limbs stiff. Temp. 103½, pulse 103. Mitral regurgitant murmur. Ordered usual treatment. On following day much better; temp., 101°. May 6. Swelling gone; some pain in loins and over heart. May 7. Developed symptoms of alcoholism, and was treated accordingly (pot. bromid., etc.). May 10. Feels all right, except some soreness in two fingers of left hand. May 16. Except stiffness in shoulders, well. May 31. All symptoms absent, except slight stiffness of knees, which disappeared after exercise. Is apparently well. June 5. Discharged cured.

Case VI.—Albert Callender, æt. 27, Sweden; laborer. Admitted May 24, 1876. One previous attack, six or seven years ago; present attack began four days ago, after exposure to wet and cold. Began in toes of right foot, swollen and painful; followed by pain and swelling of ankles. Then knees, shoulders, and thumbs became successively involved. Ankles and knees much swollen this morning. Had two profuse sweats before admission. On admission, above condition found. Ordered usual treatment. Cold locally, there being much pain. May 25. Patient much better. No pain, except a little in knees. May 27. No pain, no swelling. May 29. Discharged cured.

This patient gave a history of dyspnœa on exertion, with frequent spitting of blood, always after exertion. On examination, a mitral obstructive murmur found. Dyspnœa, etc., had existed for four years prior to present attack.

Case VII.—Walter Houseman, æt. 49; single; United States; driver. Admitted May 17, 1876. Brothers and sisters have had "rheumatism." Patient has had numerous attacks like the present. Present attack began one week ago. Shoulder and hand of right side became swollen and tender. On admission, right hand and two middle fingers of same side swollen and red. Little finger much deformed by previous attacks, as also the others, though in less degree. No fever. Ordered usual treatment.

May 20. Swelling in hand much less. Very little pain. Beginning to move fingers.

May 30. Everything gone but deformity, which existed prior to present attack. He is therefore discharged cured. In hospital thirteen days. There was no evidence of gout other than the residual deformity.

Case VIII.—Timothy Rundell, æt. 26; single; Ireland; laborer. Admitted May 23, 1876. No previous attack. Present attack began three days ago in malaise, etc., followed by stiffness on morning of May 21. Stiffness soon followed by severe pain in both knees and ankles, with considerable fever. Left wrist was soon affected and corresponding elbow. Heart has not troubled him. On admission, above joints were found tender and painful on motion; left wrist and left foot somewhat swollen and red. Ordered usual treatment. Temp. on admission, 103¼. May 24. Legs same; left wrist better. Back, right wrist, fingers, and elbow getting stiff and sore. No improvement. Heart normal. May 25. Considerable improvement. All joints of right arm sore but not swollen. Temp., 102°. May 26. Very little pain. Joints weak. May 31. Joints of arms stiff since last note. No more pain. Temp. normal. June 2. Still some stiffness in shoulders. Otherwise well. Treatment continued. June 5. Feels perfectly well; is, therefore, discharged cured. In hospital twelve days.

Case IX.—Ellen Ryan, æt. 48; married; Ireland; domestic. Admitted May 18, 1876. No history of previous attacks. Present attack began three weeks ago in right shoulder. Since then, all joints of extremities have suffered, together with certain muscles. Very little swelling has existed.

On admission, has pain in all joints, but most marked in arms. No swelling of joints except those of right arm, which are swollen and painful. Ordered usual treatment. May 20. Much improved. Right arm and left leg (joints) painful only on motion. Affection finally located in shoulders and persisted. Ordered battery as adjuvant to acid. Preferred discharge to use of battery, and was discharged, May 27, improved. Under treatment nine days.

Case X.—W. H. Higgins, æt. 20; United States; deck hand. Admitted April 14, 1876. No history of previous attack. Present attack began April 1, in right hip; subsequently all the joints. Lower extremities painful and stiff. Left work to day. On admission, is suffering from intense pain in left ankle, which is swollen, hot, and tender. Ordered usual treatment. Improvement in this case was very slow, and no sensible impression made on disease until April 22d, when, with exception of left ankle, symptoms had subsided. Swelling and tenderness persisted here (left ankle), and on May 1, lin. sap. co. and douching ordered. Not much benefit derived from them. Subsequently, tincture of iodine added externally. Slowly improved, and on May 20 was discharged improved.

The acid was continued up to time of discharge.

Under treatment thirty-six days.

Case XI.—H. G. Phelps, æt. 38; England; printer. Admitted April 18, 1876. Has had repeated attacks of subacute rheumatism. Twelve days before admission present attack began in right instep, swollen and tender; subsequently "all the joints of body" became involved. Was in bed one week before admission. On admission, all joints somewhat stiff and sore. Ankles and knees slightly swollen. Heart normal. Usual treatment employed. On following day much better. Continued to improve, and on April 24 was discharged cured. In hospital six days.

October 6, 1874. The same treatment has been continued in the first medical division of the hospital, since the date of the last case, above noted, with no change in the results; except, that in two instances, a certain amount of deafness has been produced, like that which follows full doses of quinine, transient, and in the second case, which I examined yesterday, slight in degree.

A CASE OF CATARRHAL PHTHISIS

WITH ULCERATIONS OF THE LARYNX, SIMULATING ANEURISM OF THE TRANSVERSE PORTION OF THE AORTIC ARCH.

By BEVERLEY ROBINSON, M.D.,

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The difficulty of accurate diagnosis between cases of phthisis at an advanced stage, and aneurism of the thoracic aorta has been pointed out by almost every writer who has carefully considered diseases of the chest. The clinical separation, however, of symptoms which might appear in a given instance to belong equally well to two entirely different affections, has usually been apparent when one of two conditions existed. 1. A pulsating tumor, with a blowing murmur, present in a region removed from the precordial area. 2. Symptoms due to compression, or involvement of normal structures by a heterogeneous production, and yet neither abnormal pulsation, nor other physical signs of an intra-thoracic tumor to be discovered. With the signs accurately determined of the first division just made, we shall probably find an aneurism of some portion of the aortic arch at the post-mortem examination; with those of the second division, the pathological changes of advanced phthisis are usually evident. There are cases, however, as I am well aware, referred to in text-books and encountered in practice, where phthisis has produced physical signs closely simulating those of an aneurism, and where an error of diagnosis has been made.

Unfortunately, investigation after death of pathological conditions has hitherto rarely given satisfactory proof why such mistakes should be made.

In the case which follows, on the contrary, an example is presented in which the autopsy fully justifies the interpretation made during life of the morbid phenomena then apparent.

Case.—T. F., fifty years of age, laborer, was admitted to Charity Hospital, June 20, 1876. Family history good. For several years past the patient has been troubled with cough and recurring attacks of dyspnœa. He has habits of intemperance. The cough and difficulty of breathing have increased notably within a brief period.

He expectorates abundantly, and has noticed that his voice is hoarse. Sputa are generally white or yellow, sometimes green. His paucity of voice only attracted his attention about one month ago. Patient denies having had syphilis. Upon physical examination of the chest the following signs are discovered:

Just below the left clavicle at its outer third, a distinct enlargement, as compared with the same region of the opposite side, is visible. At the level of this tumefaction there is an unmistakable pulsation. This pulsation appears to be expansive in character, and is certainly much more pronounced than the pulsation caused by the right subclavian artery. It covers an area of at least two inches in diameter.

By auscultation over the swelling described, a murmur of rasping character is readily perceived. This murmur is synchronous with the first sound of the heart, and at the moment it is heard, the head of the observer who listens, is raised up. When the stethoscope is placed over the base of the heart, its sounds are found to be normal. My patient took ninety grains of iodide of potash daily from June 21st to June 23d inclusive. At my afternoon visit on June 23d, I found the abnormal murmur under the left clavicle, as well as the tumor of the same region, decidedly diminished. There could still be no doubt, however, that the left subclavian region was more bulged than the right. Pulsation over tumor was also more limited in extent.

The left carotid artery was beating with considerably less force than the right. No appreciable difference in force or time between the pulsations of the radial arteries. Temperature not taken with thermometer, but there was manifestly some elevation of blood heat. Patient did not complain of any local pain either over the seat of pulsating tumor, or in the left arm. Voice very husky and diminished in strength. Cough almost aphonic. No laryngoscopic examination was made. Respiration performed about equally well on either side of the chest anteriorly or posteriorly. Everywhere there was a quantity of subcrepitant rales and rough breathing. There was moderate dyspnœa. No dysphagia. The iodide was continued at the same dose till June 26th, when patient died in a state of coma, which came on somewhat suddenly. The *autopsy* revealed the following lesions:

Brain in state of post-mortem decomposition.

Larynx presented many of the lesions of an advanced stage of phthisis of this organ.

Lungs.—The following is taken almost verbatim from the post-mortem record, dictated by Dr. Maxwell, Curator at Charity Hospital:

"Patches of old pleuritic adhesions on both sides. Infra-clavicular region of *left* side firmly attached to anterior chest wall. Beneath this a small cavity surrounded by firmly consolidated lung.

"*Both lungs.*—Upper lobes almost completely consolidated by chronic lobular pneumonias, many of them cheesy. Smaller bronchii show intense bronchitis, with a few oval, small ulcerations. Besides these, a few scattered, gray miliary bodies were present. The lower lobes show hypostatic congestion, with some interspersed gray granulations.

"*Heart* dilated, especially on the right side. Walls thin, flabby, and blood-stained; valves normal.

"*Aorta and great vessels at root of neck.*—The latter are normal; in the aorta, about one inch below the origin of left subclavian artery, is a calcareous patch on its anterior surface, the size of a *corn.* (*!*)"

Evidently in the case just reported, the pulsating tumor under the left clavicle was occasioned by compression of the left division of the pulmonary artery by consolidated lung tissue.* On account of the old pleuritic adhesions which attached "the infra-clavicular region of the left side firmly to the anterior chest wall," the soft parts rose and fell in a very exaggerated manner with each systole of the heart. I believe the small patch of atheroma explains in great part the blowing murmur heard during life, although the existence of the pleuritic adhesions at the apex of the left lung, and perhaps also the presence of "a small cavity" in this region, made it louder—or, as it

* It will be remarked that I do not agree with those authors who would explain my case by compression of the subclavian artery, but rather coincide in opinion with those who admit compression of the pulmonary.

were, reinforced it. Although during life a laryngoscopic examination was not made, and the question was then asked whether the loss of voice was due to compression of the left recurrent nerve, or to laryngeal phthisis, I am now fully convinced that, even though I had known loss of voice to be due to local lesions in the vocal organ itself, this knowledge would not have enabled me to avoid a partial error of diagnosis. For, while I would have been more certain in recognizing visually the advanced lesions of laryngeal phthisis, that the post-mortem examination would show the accuracy of my diagnosis, prior to death, of concomitant *pulmonary* phthisis, the aspect of the larynx would not have helped me at all to account for the extensive pulsating tumor of the chest wall otherwise than by admitting the existence of an *aneurism*.

Further, the action of iodide of potash in diminishing the extent of the bulging, helped to confirm me in my mistaken belief, for I wrongly inferred that fibrinous deposits, owing to its influence, were being made in an aneurismal sac.

The fact was, as I at present understand it, that the iodide brought down the arterial tension to a certain degree, and thus decreased the amount of swelling due in great part to transmitted pressure.

Original Lectures.

LECTURES ON FEVERS.

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(Phonographically reported for THE MEDICAL RECORD.)

LECTURE III.

TYPHOID FEVER (CONTINUED).—SYMPTOMS.

GENTLEMEN:—I shall this morning commence the history of the symptoms of typhoid fever.

If I should attempt to give you a correct picture of this disease—one perfect in all its colorings—it would occupy too much time, and you would become so confused as to be unable to recall even the outline of the picture.

After I have briefly spoken of the manner in which this disease makes its advent, I shall consider the prominent symptoms of a typical case of this fever, and then discuss in detail these symptoms, without special regard to the time of their occurrence. This fever usually is insidious in its approach, and comes on with a certain degree of uneasiness throughout the system; the patient feels uncomfortable, has no pain, but feels that he is about to be sick. If the individual is in a region where the disease is prevailing, it is quite common to hear the expression, "I believe I am going to have the fever," and yet those who make such complaint will scarcely admit that they are sick. They complain of a grumbling headache, more or less aching of the limbs, "a tired feeling all over," chilly sensations alternating with flashes of heat; loss of appetite, and not unfrequently nausea and vomiting are present. These premonitory symptoms gradually increasing in severity, by the fifth or sixth day the patient is compelled to take to his bed. At this early period there may be a slight diarrhœa. In very mild cases the disease comes on so insidiously, and with symptoms so mild, that the patient is often able to pursue his ordinary avocations, complaining only of an undefined indisposition—not feeling exactly well, but not regarding himself as really sick. In very many severe cases it is impossible for the patient to accurately fix upon the time when the fever commenced; in no case will you be able to make an early positive diagnosis. Typhoid fever may be suspected, but that is as far as you can safely go.

In all cases variation in temperature is one of the most important early symptoms. These variations in typical cases may be divided into four periods, of one week each, which correspond to the four weeks of the disease.

In the first week there is a gradual and steady rise in temperature, with regular morning and evening variations.

This is one of the characteristic features of the disease. If in any case you find, while making your thermometrical observations, that there is a gradual rise in temperature marked during the first week by regular morning and evening variations, you may be quite certain your patient has typhoid fever. This gradual rise of and these variations in temperature are not present in every case, but when they are present they will greatly assist you in making an early diagnosis.

It has been said that typhoid fever is the only disease, except double quotidian intermittent fever, that gives two full thermometrical curves within twenty-four hours, that is—two full remissions and two exacerbations. If this is true, it helps to explain certain high temperatures in the morning, and affords valuable assistance in making a diagnosis.

During the second week the variations in temperature are slight, retaining, however, the same degree of exacerbation which was reached at the end of the first week.

The variations during the third week are remittent in character.

During the fourth week they become intermittent, and the range of temperature in the exacerbations is gradually lower. The variations in pulse correspond to the variations in temperature. During the first week the pulse gradually becomes more and more frequent, and remains at the height reached, within the first week through the second and third weeks, and falls to its normal standard during the fourth week.

We have thus far briefly considered the ushering in and the early attendant symptoms of typhoid fever. We will now study in detail the prominent phenomena which attend the develoj ment and mark the course of this fever.

The Physiognomy.—As a rule, in the milder cases, the countenance has nothing peculiar in its appearance; the patient does not even look ill. If the disease is of a severe type, by the second week the countenance assumes a characteristic appearance—there is a pale, olive, leaden look, the eye becomes dull and the conjunctiva congested, and usually there is a small, rose-colored spot in the centre of the cheeks. The face does not assume the dark mahogany color, as seen in typhus, but, especially in the latter stages, it has more of the hectic flush of phthisis.

Tongue.—The tongue will also present certain changes. From the very outset it is covered with a light, white coat, but there is nothing special in its appearance before the end of the first week; then it may become red upon its sides and tips, and shows a slight disposition to dryness in its centre. As the disease passes into its second and third weeks, the tongue becomes more heavily coated—the coating becomes brown and dry, and sordes collect upon the teeth and sides of the mouth in sufficient quantities to

form crusts. These crusts may become thicker and more abundant as the disease progresses. At any period in the course of the disease the tongue may suddenly clear off, and present a shiny red appearance, "beef-colored," as it has been called. The tongue and lips may become dry, cracked, and fissured. As the sordes are removed from the lips they will often bleed; and in certain cases, more especially in the severer forms of the disease, the entire mouth and tongue may be covered with dark-colored incrustations. Such incrustations are seen early in connection with those cases where there are extensive blood changes; when present they are of grave significance.

As soon as convalescence is established the changes in the appearance of the tongue are very marked. One of the first indications of convalescence is a moist condition of the tongue about its edges, gradually its entire surface becomes moist, and by the time convalescence is fully established it is restored to its natural condition. Gastric symptoms are always more or less prominent—loss of appetite is one of the earliest symptoms, and nausea and vomiting are quite common during the first week of the fever. The vomited matters usually consist of a greenish fluid. When vomiting comes on late in the fever, it is due to gastric catarrh, or it is symptomatic of local or general peritonitis. In a large proportion of cases the thirst is excessive.

Diarrhœa.—Although not invariably present, it is so frequent an attendant of this fever that it is considered one of its characteristic symptoms. It varies with the severity of the attack, the date of its commencement, and its duration. The characteristic typhoid discharges are of a yellowish green color, described in the books under the term of "pea soup discharges." Sometimes they are of a dark color, resembling coffee-grounds; their reaction is alkaline. In some cases diarrhœa is present at the very outset of the disease, and continues throughout the entire course. In other cases it does not appear until the third week. The second week is the ordinary time for its appearance. When the diarrhœa appears late in the course of the disease, the discharges are more copious than when it appears early. A mild diarrhœa throughout the entire course of the fever is a favorable rather than an unfavorable symptom.

Intestinal Hemorrhage.—Intestinal hemorrhage is not an infrequent attendant upon typhoid fever. It occurs in about one in twenty cases, and varies in quantity from a mere trace of blood in the stools to a profuse discharge of from sixteen to eighteen ounces. The slight hemorrhages which sometimes occur early in the disease simply indicate a hemorrhagic tendency, the same as the epistaxis which is very frequently among the early symptoms. In both instances the bleeding comes from the capillaries of the mucous membrane. The more profuse hemorrhages are due to the opening of an artery in some intestinal ulcer. Hemorrhages due to this cause may be sudden and profuse, and may destroy the life of the patient. The usual time for the occurrence of these profuse intestinal hemorrhages is in the latter part of the second and during the third week. These hemorrhages are usually preceded by a sudden fall in temperature, perhaps two or three degrees; that is, when in a patient severely ill of typhoid fever a sudden fall in temperature occurs during the second or third week, accompanied by extreme prostration, it is very conclusive evidence that intestinal hemorrhage has occurred, although externally the hemorrhage may not have made its appearance. When intestinal hemorrhage occurs during the second or third week it must always be regarded as a grave symptom; yet it is not necessarily followed by fatal results.

Abdominal pain and *tenderness* are not usually present at the very outset of typhoid fever; generally, and almost without exception in the severer cases, by the sixth day of the disease some pain and tenderness will be present in the right iliac fossa. The pain and tenderness usually increases as the disease progresses, and in the advanced stages it is sometimes so marked that slight pressure over this region gives the patient great pain. While examining this region in patients ill of typhoid fever, in order to determine the presence or absence of pain and tenderness, remember never to press the surface with the ends of the fingers, but always make the examination with the palm of the hand; while making the pressure watch the face, and frequently you will be able to determine by the expression of countenance whether you are or are not causing pain, long before an audible complaint is made by the patient.

It is also important for you to bear in mind the possible occurrence of a more severe abdominal pain—namely, that pain arising from intestinal perforation. The following are the characteristic symptoms of this lesion. If in the course of a slight or severe form of this fever, or even when the disease has been latent and the diagnosis of typhoid fever has not been clear, the patient should be suddenly seized with diarrhœa, pain in the abdomen, aggravated by pressure, perhaps at first localized in the right iliac fossa, but soon extending over the entire abdominal cavity, attended by symptoms of great prostration, a rapid, feeble pulse, a sunken, anxious expression of countenance, rapid tympanitic extension of the abdomen, nausea and vomiting, quickly followed by coldness and blueness of the extremities, and the other signs of sudden collapse, you may be almost certain that perforation of the intestines has occurred. I have known this accident to occur when convalescence was progressing safely and satisfactorily. Few live more than thirty-six hours after the occurrence of the perforation.

Tympanitis is another very common symptom of typhoid fever. Usually it is not present during the first week, but by the end of the first or the commencement of the second week a fullness of the abdomen will be noticed. As the fever advances, sometimes the distention often becomes extreme; this is due to a collection of gas in the large intestine, developed from some change in the mucous membrane, the exact nature of which we do not fully understand. We only know that sometimes the mucous membrane of this intestine very rapidly secretes gas, or allows it to generate, and that the intestine becomes distended by its accumulation. When once it is developed it remains until convalescence is fully established. It is always an important diagnostic sign of this fever. In connection with the development of the tympanitis, when firm pressure is made over the right iliac fossa, a gurgling sound is produced, but gurgling in the right iliac fossa cannot by any means be regarded as a positive symptom of typhoid fever, as it may occur in any disease where there is distention of the abdomen due to accumulation of gas in the intestines. In typhoid fever, so long as the abdomen remains tympanitic, no matter what the temperature and pulse of the patient may be, he is in more or less danger, for it shows that there are intestinal changes still in progress, and that the reparative processes are not complete; this is more especially the case when the tympanitis has continued from the active period of the disease

into the period of convalescence. Therefore, the presence of tympanitis during convalescence is never to be lightly regarded.

These are the most important symptoms which are referable to the alimentary tract, and may be regarded as forming, in connection with the temperature variations, the essential part of the history of this fever.

Urine.—Extended and very careful analyses of the changes in the urine of typhoid-fever patients have been frequently made, without giving any very practical results.

Usually during the first two weeks of the fever the urine is diminished in quantity; after the second week it is increased. During the time it is diminished in quantity, its color is dark and its specific gravity is high; when it is increased and convalescence is established, it becomes pale, and its specific gravity is lowered.

The amount of urea excreted daily throughout the active period of the fever is increased. The increase is in proportion to the intensity of the fever, subject in some degree to the quantity and quality of the food taken. It will be greater when large quantities of strong beef-tea are taken, than when the diet consists of milk. So long as the kidneys are able to eliminate the excess of urea, no harm results; but if the quantity exceeds their power of elimination, or if their function of elimination is interfered with, uræmic symptoms will be developed, such as delirium, stupor, and coma.

Albumen in the urine is only of occasional occurrence in the course of typhoid fever. When present the quantity usually is small, and it is only temporarily present. It rarely appears before the third week. Its appearance is often marked by the occurrence of cerebral symptoms. Renal epithelium and casts may or may not be present with the albumen.

Nervous Phenomena.—The symptoms referable to the nervous system are not so prominent in typhoid as in typhus fever; yet there are many cases in which these symptoms play an important part in its history.

One of the most constant of this class of symptoms is headache. In the majority of cases it is one of the ushering-in symptoms of the disease. It is present in mild as well as in severe cases; sometimes it is confined to the forehead and temples, more often it extends over the whole head—not violent, but a dull, heavy pain. It usually increases in severity until the middle period of the disease, certainly until the close of the first week; and generally associated with it there is intolerance of light and conjunctival injection, pain in the back and limbs, and a general ache over the whole body.

Somnolence is another nervous phenomenon, present to a greater or less degree in all cases. In mild cases it does not appear until late, and usually is not long-continued. In the severer cases it appears early and continues until convalescence begins; in fatal cases it increases up to the time when the patient passes into a state of coma. It is often interrupted by delirium.

In children this symptom is especially prominent, and is very valuable as a means of diagnosis. For example, a child complains of feeling sick, without any well-defined pain; upon inquiry you find that he has had little sleep perhaps for two or three days; this fact alone is sufficient indication that typhoid fever will probably be developed.

Delirium is more frequently present than absent in typhoid fever. The character of the delirium varies; the usual form is what is known as the "low-muttering" delirium. This form is rather characteristic of this type of fever, and yet in very many cases the delirium may be violent in character, and may become maniacal to such an extent as to require physical restraint. Not unfrequently typhoid-fever patients attempt to jump out of a window, or to injure themselves or their attendants in their endeavors to escape from fancied pursuers, or are seized with the impression that their attendants are their personal enemies, or that within themselves there is something fearful.

It is very common for the minds of this class of patients to be occupied with those things which engaged their attention just prior to their illness. They imagine about them persons who are absent, and not unfrequently call them in the most endearing tones, or denounce them with the most violent epithets.

The delirium rarely comes on until the second week of the fever, and it commences and is most active at night. After it has once appeared it usually continues until convalescence is established, and generally disappears during a sound sleep which attends the early stage of convalescence. The maniacal form of delirium in typhoid fever is usually most marked at night. During the low-muttering delirium, if the patient is asked questions, generally he will answer correctly.

Muscular Prostration.—This is noticeable in the early stages of typhoid fever in all severe cases, and increases with the progress of the fever. It is generally most marked during the third week. Where there is complete muscular prostration, the urine and fæces are passed involuntarily, there is inability to protrude the tongue, and more or less difficulty in deglutition. These symptoms are often attended with difficulty or inability to articulate distinctly. Retention of the urine, occurring early on account of the inability of the bladder to evacuate itself, is a very unfavorable symptom; the same is true of involuntary discharges from the bowels.

Muscular Tremors.—Tremors of the hands or tongue are most often met with in young subjects, and in those who are addicted to the use of spirits. Severe tremors, unaccompanied by much mental disturbance, often attend extensive intestinal changes.

Spasmodic movements, such as subsultus, hiccough, etc., are early observed in the advanced stage of severe cases. Rigid contraction of the muscles of the neck and those of the extremities are also sometimes present in severe cases.

General convulsions are of very rare occurrence, except in very young children, and when they occur have no special significance.

Special Senses.—The symptoms referable to the special senses require little more than enumeration.

As regards the *sense* of *sight*, there is nothing worthy of note, except that the eye assumes a dull expression and that the pupil is dilated; some patients complain of haziness of vision, which is increased when they assume a sitting posture.

The *sense* of *hearing* is always more or less impaired; this is most marked about the middle period of the fever; then it is impossible for your patient to hear ordinary conversation—you will be obliged almost to shout in his ear.

Ringing and buzzing sounds in the ears are often complained of in the early stage of the fever.

When the loss of hearing is confined to one ear, it is generally caused by ulceration of the mucous lining of the Eustachian tube, or by suppuration of the middle ear.

The *sense* of *taste* usually is altered or perverted; articles of food are tasteless or have an unnatural flavor. When the tongue and mouth are covered with a heavy coating of sordes, with a tremulous tongue, the patient is unable to distinguish between bitter and

sweet, and swallows the most disgusting doses without complaint.

Hyperæsthesia is another disturbance of a special sense. The surface of the body of a typhoid-fever patient may become so sensitive that he will cry out with pain from the slightest touch. This hyperæsthesia may be present during the first week, or may not be present until convalescence is established. It is most marked over the abdomen and lower extremities, and usually occurs in females of a hysterical tendency. It is of importance that you discriminate between cutaneous tenderness in the abdominal region, and the tenderness of peritoneal inflammation.

Epistaxis.—I have already referred to this symptom as of common occurrence in the early stage of typhoid fever. When it occurs during the first week, in most cases it is of little importance, except as a diagnostic sign of this type of fever; when it occurs during the third week it becomes important as an element of prognosis, as it may be sufficiently profuse to destroy the life of the patient. Occurring late in the disease, unless it can be promptly arrested, it always jeopardizes the life of the patient.

Emaciation is perhaps more marked and rapid in this than in any other form of fever. It commences early and is progressive. By the time a patient has reached the fourth week of a typhoid fever of even moderate severity, he is usually in a condition of extreme emaciation. In this particular he markedly differs from a patient ill with typhus fever, for in the latter case emaciation to any great extent does not occur.

Progress of Medical Science.

Radical Cure of Empyema. — Dr. Peltavy, of Mannheim, reports the histories of three desperate cases of empyema, in which the operation of resection of a portion of a rib, first recommended by Roser, produced the happiest results. In the first case, that of a woman 64 years of age, a free incision had been made one month after the disease began; but in spite of all efforts to prevent it, the wound gradually closed, and the patient had hectic and was rapidly becoming exhausted, when resection was decided upon. Exactly one hundred and seventy days after the incision was made, about an inch and a quarter of the seventh rib was resected a little posterior to the axillary line. All the bad symptoms ceased on the next day, and six weeks later the wound had closed and the patient was cured. In the second case, the patient was a woman, 56 years of age, and an incision had been made in the eighth intercostal space back of the axillary line, three weeks after the disease began. The wound, however, rapidly closed, so that but little pus escaped, the fever continued, and perforation of the lung took place. Sixteen days after the incision had been made, a portion of the eighth rib was resected, and in less than two months the wound closed, and the cure was complete. In the third case, the patient, a man 22 years of age, had suffered from empyema a year and a half, and a fistulous opening had existed for a year and a quarter. The opening was enlarged by the knife, and persistent but vain efforts were made during four months to keep the wound sufficiently open to permit of free drainage. Finally, about an inch and a quarter of the sixth rib was resected. In three weeks, the wound had contracted so that a catheter could with difficulty be passed through it, and in six weeks the fistula was closed and the patient permanently cured.

The good effects of this operation do not seem to depend entirely on securing a free outlet for the pus, but partly on the reduction in the size of the cavity produced by the falling in of the ends of the resected rib. After the operation, washing out the cavity and the other necessary manipulations are much less painful, and the patients are consequently more willing to submit to a prolonged treatment. Finally, the operation does away with the necessity for wearing a canula, and the pleura is saved from the irritation consequent on the presence of a foreign body.—*Berliner klin. Wochenschrift*, May 8, 1876.

Treatment of Diabetes Mellitus. — During the last few years Prof. Ebstein, of Göttingen, has treated a number of cases of diabetes mellitus with carbolic acid, with the result of causing a complete disappearance of the diabetic symptoms in a certain number of the cases, while others were entirely unaffected by the remedy. He accounts for this diversity in therapeutic results by a theory that diabetes is symptomatic of different pathological processes that call for different therapeutic measures. The close relationship between carbolic and salicylic acid then induced him to give the latter a trial. In the first case in which he tried it, it was given in small doses, only from five to eight grs. per diem, and produced no effect at all, while twenty-five grs. of carbolic acid caused the disappearance of the diabetic symptoms in four days. The professor, however, now publishes the histories of two cases, in which carbolic acid and other therapeutic measures were utterly useless, one of which was cured and the other greatly benefited by salicylate of soda. In the first case, seventy-five grs. of salicylate of soda were given daily in three doses for eleven days. On one day one hundred and fifty grs. were given, but caused vertigo, noises in the head, and fainting fits. In the second case, one hundred and fifty grs. of salicylate of soda was given in four doses on the first day, but it caused so much humming in the ears, that the quantity was reduced on the next day to three doses of thirty-seven grs. daily. Nine days later, the quantity was increased to forty-five grs. three times daily, and in fifteen days the urine was reduced to the normal quantity, and the sugar to one-third of the quantity passed before the remedy was used. The quantity of salicylate of soda was subsequently reduced to seventy-five grs. daily, and the patient is still under observation. In this case, restriction to a diabetic diet did not seem to aid the action of the drug, and in the first case the cure took place while the patient was allowed a mixed diet, exclusive of potatoes.—*Berliner klin. Wochenschrift*, June 12, 1876.

Action of Salicylic Acid on the Bones.—At the meeting of the *Niederrheinische Gesellschaft* in Bonn on December 6, 1875, Prof. Koster reported the results of his experiments on the action of salicylic acid on the osseous system. Pieces of spongy bone become soft as leather in a few days when placed in a half per cent. solution of salicylic acid, while compact bone tissue is very slowly softened. The enamel of the teeth is very slightly affected by it, but the dentine where it is exposed by caries is rapidly destroyed. Dentists have already recognized the evil effects of salicylic acid on the teeth. The increased amount of the salts of lime in the urine soon after salicylic acid has been taken, shows that the acid deprives living as well as dead bone of its lime salts.

In the discussion that followed, Prof. Binz maintained that the acid is entirely harmless when given for a short time in the proper way. The neutral salt of soda produces the same effects as the acid.—*Berliner klin. Wochenschrift*, July 3, 1876.

Treatment of Phagedenic Sores.—Dr. Weisflog, of Zurich, recommends the electric bath as an unfailing remedy to relieve the pain of phagedenic chancres. One electrode is to be placed in the water, and as soon as the diseased part is submerged, the other electrode, which should be covered with a moistened sponge, is to be gradually seized with two or more fingers, the patient himself regulating the strength of the current by holding the electrode firmly or lightly. Where the bath is unattainable, the nerves running towards the sore should be faradized by means of the sponge electrode. It is important to avoid exciting muscular contractions in the neighborhood of the sore. In the intervals between the baths the sore should be covered with charpie soaked in fat, which the patients generally prefer to all other applications. After the first faradization the pain returns rapidly, but is less severe; gradually, as the electric baths are repeated, the intervals of freedom from pain become longer, until after eight or ten days the pain is not greater than that of an ordinary chancre. The sore itself does not improve under this treatment, but it enables a proper course of local treatment to be carried out.

Of the mercurials, the Doctor prefers the hydrarg. oxydulat. nitricum, which he uses as a salve in the proportion of one to fifty or sixty. It causes slight burning at first, but the floor of the ulcer soon becomes clean, its margins become depressed, and cicatrization advances so rapidly that the entire process is finished in from fourteen to twenty days. The osteocopic pains do not yield much to the faradization, but are greatly relieved by subcutaneous injections of hydrargyrum oxydulatum nitricum in one per cent. solution. This remedy acts well when given subcutaneously; does not, like injections of the sublimate, lead to new gangrenous ulcers; is less painful; produces no abscesses; and introduces into the body a larger quantity of soluble mercury, without exciting salivation. The Doctor uses the injection once in every fourteen days, and as a rule finds that the osteocopic pains are entirely relieved after two months of this treatment.—*Allg. Med. Cent.-Zeitung*, June 17, 1876.

Chylous Ascites produced by Parasites (Hæmatozoa).—Dr. F. Winkel reports the case of a woman, 39 years of age, who had lived long in Surinam, and who, one year after her return to Germany, became affected with ascites, which at first was improved by medical treatment, but later on required paracentesis. About two quarts of a fluid resembling buttermilk were drawn off, in which the microscope revealed the presence of a large number of thread-like, actively moving organisms, $\frac{1}{125}$ in. in length, by $\frac{1}{2500}$ in. in breadth. They had a rounded head with four or five cilia, and a sharp-pointed tail. The patient improved somewhat after the operation, but died soon after without having been seen again by Dr. Winkel. The urine appeared to be normal. Menstration was regular, although the patient suffered from a prolapse of the bladder and womb consequent on the ascites. After the paracentesis a tense, painful swelling of the left leg, and especially of the veins, set in, and lasted for a long time.

Winkel points out the similarity between these entozoa and the filaria discovered by Lewis in chyluria, and thinks that in this case the filaria made their way from the intestinal canal into the lymphatic vessels, and thence into the peritoneal sac. They were probably present in the blood also, and perhaps excited the thrombosis of the veins. The patient stated that a similar affection was not unfrequently met with in Surinam.—*Centralblatt für Medic. Wissenschaften*, June 17th.

The Diagnosis of Progressive Pernicious Anæmia.—Prof. Eichhorst, of Jena, thinks that he has discovered by means of the microscope a certain means of diagnosticating this disease in its earlier stages. The disease is essentially an affection of the red blood-corpuscles, and is as easily recognized as leukæmia. A certain number of the corpuscles are of normal size, and are only noticeable for their remarkable paleness and slight tendency to form into rolls, but others are remarkable for their small size. These latter are often not more than quarter the size of the normal corpuscles, but are more deeply colored, and have lost their biconcave contour more or less completely. Many of them look like small fat-drops, colored red.

The professor has met with seven cases of this disease, in all of which the blood presented the above peculiarities, while they were not found even once in several hundred examinations of the blood of healthy persons and of persons suffering from other diseases, especially such as produced an anæmic or cachectic condition. If the disease in question be observed for a lengthened period, from the earlier to the later stages, the number of these small abnormal elements will be seen to gradually increase, and they may be as numerous as the normal corpuscles. In all his observations the white corpuscles were notably few in number, as were also the small masses of protoplasm which are often met with in healthy blood.—*Centralblatt für Med. Wissenschaften*, June 24.

Dislocation of the Hip.—At the meeting of the *Niederrheinische Gesellschaft* in Bonn, December 20, 1875, Prof. Dontrelepont reported the following case:

About the end of May, a boy seven years of age, met with a traumatic dislocation of the right hip, upwards and backwards. The luxation was not reduced, and when he entered the hospital on August 30th he was unable to stand on the leg; the thigh was strongly flexed, adducted, rotated inwards and shortened, and the head of the femur could be distinctly felt lying on the ileum. Permanent extension and counter-extension were at once applied, and on September 6th the head of the bone was drawn down close to the acetabulum, the shortening was almost overcome, and the flexion, adduction, and internal rotation were very slight. The patient was then anæsthetized, and the thigh was strongly flexed and adducted, and then rotated outwards without force, and the head of the bone slipped into the articular cavity with a snap. Slight inflammatory action followed, but when the case was reported the patient was able to move about, and the movements of the joint were almost normal. Professor Dontrelepont believes that the easy reduction of this dislocation was due to the previous permanent extension, and thinks that in many cases of old luxations that resist the ordinary measures of reduction, the prolonged use of extension and counter-extension will stretch the muscles and ligaments, and make the head of the bone more movable, and so enable the reduction to be made. Even if this fail, the extension will place the thigh in a better position and make the joint more useful.—*Berliner klin. Wochenschrift*, July 31, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

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PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, October 14, 1876.

CONCERNING DISCUSSIONS.

THE interest of any subject which may be presented to a society is so much enhanced by the manner in which it is discussed, that we are often surprised that the chairmen do not take more pains to keep the members to their text. The disposition to wander from the subject under discussion has so developed itself by usage and tolerance, that it has become almost one of the distinguishing features of a meeting of medical men. The difficulty seems to be that the right men do not talk at the right time, and that others who are given the talent of loquacity have not enough of modesty to balance their own opportunities with others' interests.

To one accustomed to attend the meetings of medical bodies, it is often amusing to note the great difficulty which the members have in sticking to the point at issue. It should be generally conceded that, if a subject is so entirely new that not even the talking member knew anything of it before the meeting, there was the best possible reason for waiving discussion altogether. Not unfrequently, however, these papers are the most discussed, and give the chronic debaters the best possible chances for saving what they may consider to be the fortunes of the evening.

The desire to discuss a subject at all hazards is one reason why so many side issues are brought in and so much irrelevant matter allowed. The latitude given to the members is sometimes astonishing, considering the distinct purpose for which the meeting is called. We have known, for instance, the discussion of a paper on the pathology of phthisis to terminate or rather dwindle into a reference to the best methods for treating piles. Again, a discussion on the treatment of croup drifted, by curiously unaccountable means, into a canvass of the merits of vaginal syringes. These circumstances certainly cannot excuse the desire which the different chairmen may have for filling up the hour, or apologize to those who lose their time by attendance upon such meetings. We have had enough of these doings, and we hope during the present society season to see some radical change in the ordinary run of society affairs. It seems quite necessary that something should be done to repress the irresponsible and talkative members—in fact, that as far as possible, speakers should be selected who, by special previous preparation, entitle themselves to be heard, and who would give ample satisfaction to all present. Although this arrangement may leave the selection open to the charge of partiality on the part of the chairman, it is still, nevertheless, the only one which under present circumstances is feasible. Of course this would not exclude a participation by others not named in the programme, but would give the discussion a fair start, and hedge in the legitimate premises upon which argument should be founded. If, on the other hand, the subject is merely announced for discussion, the natural modesty of the member who ought to speak is replaced by the alacrity of the one who wants to speak; and the result is some remarks, the greatest merit of which is in their ending. So much depends upon suitable preparation for discussion, that we have known its neglect to spoil the best of papers, and its attention to redeem the most commonplace communications. Let our presidents of medical societies take the hint.

NURSE-TRAINING.

THE value of trained nursing is beyond argument. The main question at the present time is how the object can be best attained. Although the medical profession has long felt the want of competent and trustworthy attendants upon the sick, it is somewhat remarkable that it should have neglected any active means to remedy it. Now that promising movements are inaugurated, with the desired end in view, the next best thing we can do is to give it all possible sympathy and support. So far as we know this has been done, and our good intentions are redeemed by a cordial cöoperation with others who have anticipated us.

The establishment of training schools for nurses is a movement which in this country, particularly, has been attended with marked success. But as yet the beginning is hardly made; and while it proves the good effects of what has been done, it foreshadows the work yet to be accomplished before the full benefits of the system can be realized.

There are now five nurse-training schools in this country, all in active operation and with every promise of future usefulness. With a view of enlarging the benefits which belong to them, and of proposing a more comprehensive plan of organization, a member of the Hospital Committee of the State Charities Aid

Association has recently written a very interesting, suggestive, and elaborate tract * upon the subject.

In the publication in question a very succinct and yet comprehensive history is given of the manner of nursing in the hospitals of the world for the past century, and the different improvements which have been made in this service up to the present. The more we learn of the nursing capabilities of the several institutions named, the more are we impressed with the fact that the want for trained men and women attendants is more and more a necessity. As an offset to this, however, it is a matter of congratulation that not only is this necessity fully realized, but that the proper spirit is being infused into some of the philanthropic ladies of our land to meet it. Being convinced that nurse-training establishments are the only means calculated to accomplish this end, we are ever ready to consider any propositions or plans of organization which may render their good works more general and more effective. We perfectly agree with the writer of the tract that nurse schools should be a part of hospitals, and that the directress or superintendent should have a recognized position in the board of administration. This, of course, is founded upon a presumption, which we believe to be reasonable and just, that the best nurses are females, and that as far as possible the gentler sex should be in the majority. The recommendation that a certain number of ladies should be added to the hospital board may be right enough in principle, but we fear will hardly do in practice. Still, for the sake of the argument, we should be willing to see the experiment tried. The suggestion that the hospital should not only furnish instruction and practice, but board, lodging, and wages for those engaged in the study of their art, is eminently proper, and one which any board of managers can easily see will be in the highest degree advantageous to the interests of their respective institutions. In regard to the details of management there must necessarily be so many modifications, conformably to the different administration of hospitals, that no fixed rule can be followed. The encouragement which hospital committees have given to nurse-training organizations not only proves the general interest in the movement, but promises in the no distant future the realization of a hope that the managers themselves, instead of following the lead of outsiders, will be ready to take the initiative, so that a nurse-training school will be considered as much a part of organization as the medical staff itself. We see no reason why it should not be so—why the hospitals all over our land should not turn out each year a goodly number of skilled nurses, men and women, whose good services would be more than welcomed whenever and wherever they could be obtained. No one could be too strongly in favor of any plan calculated to meet this want, and none who by influence or example can fail to anticipate it more effectually than by giving every encouragement to the nurse-training schools of our midst. Let us throw open our hospital doors and wish them that God-speed which their good work so well deserves.

* A Century of Nursing, with Hints towards the Organization of a Training School. By a Member of the Hospital Committee. New York: G. P. Putnam's Sons, 1876.

Reviews and Notices of Books.

MEDICAL AND SURGICAL MEMOIRS. By JOSEPH JONES, M.D. Vol. I., pp. 820. New Orleans, 1876.

PROF. JONES has long since earned for himself the reputation of an indefatigable worker and a pains-taking observer. In the volume before us, which is one of the author's best efforts, we have a remarkable example of what can be accomplished by one individual in the direction of originality and elaboration. One is impressed with the idea that the author loves to write, and is, on this account, inclined to forgive a certain diffuseness of style which amounts almost to tediousness. Still the vast array of facts, historical and otherwise, so amply compensate for the objection of too much detail, that in general the reader will accord to him unqualified praise. Especially will this be the case when the circumstances under which the book has been written are fairly appreciated. Most of the facts of personal observation related, and the experiments given, were elaborated during the late civil war, and were, practically speaking, without any outside aid. The work is remarkable, not only in regard to its originality, but to the wonderful amount of patience and study necessary for its production. The contents of the volume are quite varied, and to the student engaged in investigating all the intricate problems connected with the diseases of which it treats, it is almost invaluable. The bulk of the work is composed of investigations on the nature, causes, relations, and treatment of traumatic tetanus, preceded by an elaborate historical account of the study of nervous diseases in general. All the phenomena of the disease are fully presented from the time lockjaw was first observed and recorded as a distinct affection, down to the present time. As the result of his studies he comes to the conclusion that heightened bodily temperature is only an epi-phenomena, and no indication of a pyrexial state; that the spinal cord alone is not the seat of the disease, but that it often becomes merely the seat of over-exalted functional activity, as the result of peripheral irritation. The pathology of tetanus is presented with a wonderful elaboration as to historical study, but our author is unable to throw any particularly new light upon the subject. His account of experiments with the different so-called specifics are extremely valuable as disproving many of the hap-hazard conclusions which have been arrived at by superficial observers.

The subject of cerebro-spinal meningitis is also treated in this volume, as well as the general history and character of dropsies, and his remarkable experiences in the treatment of pneumonia, so fatally prevalent in the Confederate ranks. Altogether the work is a monument of individual industry and remarkable antiquarian research.

Reports of Societies.

INTERNATIONAL MEDICAL CONGRESS.

SECTION OF MENTAL DISEASES.

The Section met Monday, Sept. 4, at 3 P.M. Dr. John P. Gray, of Utica, Chairman; Dr. Walter Kempster, of Wisconsin, Secretary. The first question was the

MICROSCOPICAL STUDY OF THE BRAIN,

By Walter Kempster, M.D., Supt. Northern Hospital for Insane, Oshkosh, Wisconsin, Reporter.

It was based on microscopical examination of 115 cases of insanity of all common forms, including acute and chronic mania, melancholia, dementia, general paresis, and insanity following epilepsy. He discussed the changes common to the arterioles and capillaries; deposits on the walls of the same; abnormalities consequent on engorgement, the prominent ones being permanent enlargement of the vessels, fusiform dilatations, and miliary aneurisms, occlusion from minute thrombi and embolism, alteration in the course of the vessels, and the effect each condition produces on surrounding tissues. The investing, or perivascular sheath, and the perivascular canal and its contents, were discussed; he had never failed to find both sheath and canal in every case of insanity. In the canal he had frequently found lymphoid bodies which could be made to move about in fresh specimens. His conclusions were, that the canal was a conduit conveying products of water from the cellular elements into the lymph space in the pia mater; the canal existed in the normal brain, and was then more difficult of demonstration. He dwelt on changes observed in nerve cells and their prolongations, and cited the general results recorded by him in a large number of cases of insanity, dwelling particularly on the earlier departure from the normal states. In certain cases examined by him the disease had existed from six days in one case to sixty days in others before death occurred; distinct lesion in the nerve cells could be made out. His conclusion was, that the nerve cells become affected very early in the disease; in certain cases the change preceding the mental alienation.

He regarded the names, "miliary sclerosis" and "colloid degeneration," as unfortunate in not describing the true condition, and being apt to mislead. He has found miliary sclerosis in patches of sclerosis proper or gray degeneration, and the "colloid degeneracy" does not respond to reagents known to affect true colloid tissues. Changes in the neuroglia were described, also abnormalities in the nerve fibres. Finally, he stated the various lesions found in the several forms of insanity; and without asserting that a distinct lesion could be found in each form, he grouped those which he had found common to such, and stated that certain lesions appeared common in the earlier forms, and in the majority of cases were found in the nerve cells.

In conclusion, he showed a number of photo-micrographs on glass, projected on the screen by the lantern, illustrating the changes described.

Dr. Isaac Ray said the paper exhibited great research, and pointed out the way for further profitable investigation. Pathology of the brain had heretofore been unsatisfactory. The scalpel had done its work, and we must rely upon the microscope for further knowledge, notwithstanding certain persons have affected to deride such investigations, but from them we are to derive ideas on causation of disease. He was not ready to endorse every assertion about microscopic changes, or to say that by examining a slice of brain under a microscope we can tell whether a person was insane or not. That time may come, however, and this paper indicates the great advances made in this direction. Examinations in this department should be encouraged in all our institutions.

Dr. Thomas S. Kirkbride said the character of the paper precluded a great deal of discussion, as there were so few who fully understood the subject. He offered a resolution tendering Dr. Kempster their cordial thanks for his paper, and recommending it to the Congress for publication in the Transactions, with the suggestion that the Committee on Publication reproduce as many of the photo-micrographs as may be necessary to illustrate the paper.

Dr. John P. Gray, Chairman, stated that he concurred in what had been said about the paper. In the present state of progression in such investigations we cannot yet reach special conclusions, but may arrive at general results. Certain changes appear to be common in all the forms of insanity; some of them have been observed in forms of nervous disorder, in which the mental status had not been involved; but these facts should stimulate further investigation, as it is the only line left open for further progress.

Dr. Kirkbride's resolution was unanimously adopted.

On Tuesday Dr. Isaac Ray, Reporter, read a paper on the

RESPONSIBILITY OF THE INSANE FOR CRIMINAL ACTS,

setting forth in a very able manner the differences of opinion among jurists and physicians on the question how far insanity should be admitted as an excuse for crime, and he briefly touched upon the opinion of prominent jurists who had discussed this important subject.

Dr. T. S. Kirkbride said that, without committing himself to every assertion made by the writer, the main facts met with his approval, and the ideas should be disseminated; as emanating from this body, the paper will have weight and influence. Dr. Ray's utterances are clear and distinct, and should be made public at this time, when there is a tendency to hold the insane responsible for acts committed when they are insane.

Dr. Clement A. Walker concurred in this paper, which he regarded as a very valuable contribution. To-day there is a reaction against insane people which is growing stronger, especially in Massachusetts, where quite recently the action of the Executive in commuting sentence passed on a person believed by many to be insane, had been received by portions of the community as a direct interference with a proper course of the law, and great feeling has been exhibited. There are some in our specialty who may differ with Dr. Ray on "limited responsibility," but, as a whole, the paper is excellent, and he trusted would receive the endorsement of the Section.

Dr. C. H. Hughes, of St. Louis, did not concur in all the views held by the distinguished author, but approved of the paper as a whole.

Dr. Johnson said he might refrain from endorsing every sentence, but could certainly express an opinion on a subject of so much importance.

Dr. John P. Gray did not endorse the views of the writer as a whole, differing essentially on points involving "limited responsibility," and what the writer called "moral insanity." The conclusions, however, met with his approval.

Resolutions containing the following conclusions were adopted: That there is at present a tendency to hold the insane responsible for criminal acts; that the

tendency is unphilosophical, unjust, and contrary to the teachings of pathology. Therefore, *Resolved*, That the Section endorse the conclusions of the reporter, and present the paper to the General Congress for publication in the Transactions.

On Wednesday Dr. C. H. Hughes, Reporter, read a paper entitled

SIMULATION OF INSANITY BY THE INSANE.

His conclusions were, that it is not only not impossible for the insane to simulate insanity for a purpose in any but its gravest forms of profound, general, mental involvement, but that they actually do simulate acts and forms of insanity for which there exists no pathological warrant that we can discover in the real disease afflicting them.

Dr. Ray reviewed the subject *in extenso*, and referred to the time when insanity, as an excuse for crime, came prominently before the profession. Certain of the insane knew they were insane, and that insanity was an excuse for crime, and when they had committed criminal acts they would simulate to avoid the consequence of the act. It requires no more exercise of the intellectual faculties to simulate than to do many other things which are of daily occurrence. The Reporter had gone fully into the subject, and had clearly explained the views held by the majority of those who have had large experience among the insane. The subject, however, is not as fully understood as it should be by the profession, the members of which are as liable to be called to decide this matter as those who have training in the wards of our hospitals.

The paper was unanimously referred to the General Congress for publication in the Transactions.

THE CHRONIC INSANE.

On Thursday afternoon Dr. C. H. Nichols, of Washington, D. C., Reporter, read a paper entitled "The Best Provision for the Chronic Insane." He reviewed the subject of the provisions made for them, and alluded to the practice in other countries. Communications received from those particularly interested indicated that the provision was inadequate in every State in the Union. It was not possible to expect States to build new hospitals to accommodate all the insane, but very much might be accomplished economically and readily by building on to the structures already erected, thus providing for six or eight hundred in one building, and that they could be attached or removed a short distance from the main structure. The Legislature would be more easily persuaded to provide for the insane in this way than in any other.

Dr. C. A. Walker, of Mass., assented to the propositions, excepting the one advocating increase of numbers above 250 patients in one hospital. He did not think it proper to put 600 or 800 insane in one hospital.

Dr. Ray approved of the paper with the same exception, which he regarded as a fallacy; they could not be cared for more economically in large numbers than in smaller. After four hundred in a hospital all appliances must be increased, and it is a question whether the increased number cannot be more economically provided for in another hospital. The object in establishing the Willard Asylum in New York was to decrease the expense, but their last report shows cost very little below that of other institutions, and everything had been done on what has been called the economical plan, so that there will be constant repairs needed to keep the building whole. Scattering the insane all over a farm in detached buildings or cottages does not lessen the cost of provisions. It is a fallacy to suppose that the labor of the chronic insane can be utilized better from a cottage than from the main structure. The tendency is at present to build cottages, but it did not meet his approval.

Dr. Kirkbride approved of the paper as a whole, but also objected to increasing the number of patients beyond two hundred and fifty, and to the proposition to build detached structures. Cottages were erected many years ago at the Pennsylvania Hospital for the Insane, but they were found impracticable. It was impossible for the Superintendent to give necessary oversight to the insane scattered in cottages over a three or four acre farm.

Dr. Walker offered similar objections. He said that Dr. Jelly, Superintendent of the Retreat at Hartford, did not regard the Appleton buildings recently constructed there as desirable, because they were removed from the main structure.

Dr. J. P. Gray considered the greatest exception to Dr. Nichols' paper was the proposition to erect structures half a mile from the main building. There can be no objection to increasing the number of insane in one hospital, if the staff of medical assistants is proportionately increased. Assistant physicians should be prepared for work in insane hospitals by previous training and experience in general hospitals. With competent medical staff, he saw no objections to hospitals for 600 or 800 patients.

The paper of Dr. Nichols was further discussed by Drs. David D. Richardson, of Philadelphia, Jewett, Kempster, and Hughes. Dr. Nichols made some explanations relative to the proposition to erect separate structures, after which resolutions were adopted, tendering Dr. Nichols thanks for his thoughtful, able, and instructive paper, and recommending it to the Congress for publication, with the approval of the Section, except as to the number of patients most advantageously accommodated in one institution, in respect to which there was some difference of opinion.

CONNECTION OF SYMPTOMS AND LESIONS.

Dr. Edward C. Spitzka, of N. Y., presented a paper "On the Methods of Examination which will reveal a clear and decisive Connection between the Symptoms of Insanity and the Pathological Lesions on which they depend." The paper was illustrated by sections made from an abnormal brain, which were examined under the microscope. The paper was, without discussion, referred to the Committee on Publication. The Section then adjourned *sine die*.

SECTION OF OPHTHALMOLOGY.

This Section was organized Monday, Sept. 4th, with R. Brudenell Carter, Esq., F.R.C.S. of London, as Chairman, and John Green, M.D., of St. Louis, as Secretary.

CAUSTICS AND ASTRINGENTS.

The work of the Section was opened by Professor Henry W. Williams, of Boston, Reporter, on "The Comparative Value of Caustics and Astringents in the Treatment of Diseases of the Conjunctiva, and the best Mode of applying Them." He advocated the employment of the milder class of local remedies as sufficient in all forms of conjunctival disease; some of these affections, those of traumatic origin for example, generally doing best under the use of emollients rather than of astringents. In the phlyctenular form of conjunctivitis only the mildest stimulants were held to be ad-

missible, and of these the reporter expressed a preference for a collyrium of borax (gr. x. to ℥ i.); also touching the conjunctival surface of the upper eyelid lightly with a smooth crayon made from a crystal of alum, in chronic cases.

In the early stages of conjunctival catarrh of moderate severity, bathing the closed eyelids with cool water, and the frequent use of collyria of borax (gr. x. to ℥ i.), or of alum (gr. v. to ℥ i.), or once or twice very lightly touching the palpebral conjunctiva with a polished crayon of sulphate of copper, were recommended as ordinarily sufficient, reserving the somewhat more active employment of the copper crayon, and the use of solutions of nitrate of silver for severer cases of the disease, especially in its chronic forms. In trachoma, he would use the copper crayon in preference to the lapis mitigatus or silver solutions, but without questioning the utility of the latter when skilfully applied. In the acute stage of purulent ophthalmia, especially in the gonorrhœal form, stress was laid on the persistent use of iced compresses, conjoined with extreme care in cleansing the eyes, and frequent use of mild astringent collyria of borax (gr. x. to ℥ i.) alum (gr. v. to ℥ i.) or sulphate of zinc (gr. ss. to ij. to ℥ i.). In the chronic stage, the sulphate of copper crayon was recommended as, on the whole, the best form of astringent. In ophthalmia of new-born children, mild treatment, seasonably begun and faithfully carried out, was advocated almost to the exclusion of other modes of practice.

The following conclusions, being substantially as reported to the Section by Professor Williams, were, after full discussion, unanimously adopted:

1st. In a considerable number of essentially transient affections of the conjunctiva, and in pterygium and other growths, no active treatment, by caustics or astringents, is required.

2d. Where disease affects only a limited portion of the conjunctiva, as in phlyctenular inflammation, the mildest stimulating or astringent remedies are usually sufficient.

3d. In the acute and chronic forms of general conjunctivitis, astringents are, as a rule, safer, as well as more efficacious than caustics, and therefore better adapted to the requirements of the general practitioner.

The discussion revealed a preference on the part of many members for somewhat stronger applications than those advocated by him in ophthalmia of the new-born, viz., nitrate of silver (gr. v., or sometimes gr. x. to ℥ i.) applied over a day, for a few days only, to the everted eyelid, and neutralized by immediately washing it off with salt water. In severe purulent, and especially in gonorrhœal ophthalmia, when attended with great swelling and hardness of the lids, stress was laid on the value of free division of the outer canthus by a single cut with strong scissors, both as a means of relieving pressure on the globe and of abstracting blood.

TUMORS OF THE OPTIC NERVE.

On Tuesday, Sept. 5th, a paper was read by Hermann Knapp, M.D., of New York, Reporter, on this subject. He cited the few cases of optic-nerve tumor contained in recent medical literature, including three under his own observation, two of which had been reported in full in the Archives of Ophthalmology and Otology. These tumors may be of various kinds, and are generally such as afford a hope of more or less permanent benefit from their removal. A prominent feature in the paper was the description already published, of two operations for removal of the tumor without sacrifice of the eyeball, which although blind, may often be preserved, and disfigurement attending its enucleation avoided. The paper of Dr. Knapp, embracing an exhaustive analysis of all the reported cases, was unanimously referred to the Congress, with recommendation to publish.

THE EYES OF SCHOLARS.

A paper was next received from Dr. C. R. Agnew, of New York, entitled "Contributions to the Statistics of the Conditions of the Eyes of Scholars, being a résumé of the Observations of Dr. E. Williams, of Cincinnati, Dr. Wm. Cheatham, of New York, and Drs. J. S. Prout and A. Mathewson, of Brooklyn." The general conclusions from the statistics embraced in it were presented through Dr. Webster, at the meeting of the American Social Science Association, in 1875, but the statistics themselves had never been made public. After much interesting discussion of the causes of the myopia which is clearly shown to develop itself in close relation to the use of the eyes in performance of the work required in our city schools, the Section unanimously recommended to the Congress that the paper be printed, with the statistical tables in full.

ORBITAL ANEURISM AND EXOPHTHALMOS.

On Wednesday, Sept. 6th, a paper on "Orbital aneurismal Disease, and Pulsating Exophthalmia; their Diagnosis and Treatment," was read by E. Williams, M.D., of Cincinnati, Reporter. Several interesting cases were reported in some detail, and one somewhat obscure case of exophthalmos, of traumatic origin, was exhibited to the Section.

Dr. Geo. C. Harlan, of Philadelphia, then presented an abstract of the histories of two cases of pulsating exophthalmos, already published by him, in one of which a cure had followed systematic and long-continued compression of the carotid artery. In the other case, after eight years of uninterrupted progress, severe orbital inflammation occurred during the past year, and ended in suppuration and cure of the disease, but with loss of the eye by corneal ulceration.

Both papers were referred to the Congress with the recommendation to publish them.

ARE CERTAIN AFFECTIONS OF THE EYE HEREDITARY?

On Thursday, Sept. 7th, a paper was read by Edward G. Loring, M.D., of New York, Reporter, on the question, "Are Progressive Myopia and Posterior Staphyloma due to Hereditary Predisposition, or can they be Induced by Defects of Refraction, acting through the Influence of the Ciliary Muscle?" The conclusions reached by him as to the influence of hereditary predisposition in production of myopia were necessarily based on indirect evidence rather than on direct observations, the latter kind of evidence being almost wholly wanting. Comparing statistics published by Erisman in Russia, Max Conrad in Germany, with observations made by Dr. R. H. Derby and the reporter in New York, the conclusion seems irresistible that many cases of original hypermetropia must pass through the stage of emmetropia to become at last cases of myopia. If this conclusion is accepted, we have to assign to the different exciting causes of myopia a preponderance so great as to enable them actually to overpower inherited hypermetropia; and in the presence of active exciting causes of such potency, hereditary predisposition must be held to play a comparatively unimportant part. Inherited weakness of the scleral tunic, which predisposes it to yield to distending causes, is probable, but how important a part it plays in the causation of myopia is not to be determined in the present state of our

knowledge. The conclusion upon this point, as formulated by the reporter, is as follows:

"From the fact that so large a percentage of children are myopic, whose parents are not near-sighted, while the myopia increases directly with the amount of increased tension of the eyes, and from the fact that an interchange of refraction may occur whereby an eye which is not congenitally myopic may become so in spite of hereditary tendency against it, it would seem to follow that hereditary predisposition, though undoubtedly a potent cause, is not only not the sole cause, but it is not even the predominating cause."

In the discussion of this proposition, astigmatism, an extremely frequent complication of high grades of myopia, was cited by Drs. J. Green and Wm. Thomson, as one of the possibly or probably potent exciting causes of myopia, and the importance of more careful determination of the existence of medium and low grades of astigmatism in future examinations of refraction in school children, was insisted on.

The conclusion was unanimously adopted by the Section.

With regard to the question as to whether the ciliary muscle, acting through faulty refraction, can produce myopia and conus, the reporter concludes: "That the action of the muscle, taken by itself, exerts but little influence on the production of myopia, and still less on the formation of the cone."

This second conclusion was debated by Drs. Wm. Thomson, Risley, and Shakespeare, who inclined to the view that the conus is the expression of the effect of the dragging of the radial fibres of the ciliary muscle on the choroid, other members attributing to the strain of accommodation only a secondary influence exerted through the production of hyperæmia leading to hypersecretion and finally to distention of the globe.

This proposition was adopted by the Section, by a vote of fifteen to seven—several members not voting.

REFRACTIVE LESIONS OF THE EYE.

Dr. George T. Stevens, of Albany, N. Y., then read a paper on "The Relations between Corneal Diseases and Refractive Lesions of the Eye." He advanced the interesting view, based on his clinical experience and illustrated by two cases, that refractive lesions predispose to disease of the cornea, and that thus the correction of errors of refraction may be highly important in the treatment of certain chronic or recurrent cases.

This paper was referred to the Congress, with the recommendation to publish.

CYST OF THE IRIS.

A case of cyst of the iris was exhibited to the Section by Dr. Geo. Strawbridge, of Philadelphia.

INSTRUMENTS EXHIBITED.

On Friday, Sept. 8th, Dr. Risley, of Philadelphia, exhibited an instrument for facilitating the investigation of refractive anomalies, and Dr. Shakespeare, of Philadelphia, presented his combined ophthalmoscope and ophthalmometer. Both instruments have been described in the *American Journal of the Medical Sciences* during the past year.

The Section then adjourned *sine die*.

Dr. Alpheus B. Crosby of this city has been elected President of the New Hampshire State Medical Society.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, Sept. 21, 1876.

Dr. S. S. Purple, President, in the Chair.

Dr. F. A. Burrall read a paper on

NITRITE OF AMYL AS AN ANTIDOTE TO CHLOROFORM,

in which he brought it forward as the most available of all medical agents to avert the dangerous influence of chloroform when used as an anæsthetic. It was believed that nitrite of amyl acted as an antidote to chloroform by producing a direct paralysis of the vascular walls, hence caused a rapid circulation. Dr. Burrall recapitulated the experiments performed upon cats and dogs by others and himself, and set the amyl down as an agent which should always be in the armamentarium of the medical man who went prepared to meet any emergency that might arise while producing anæsthesia with chloroform. It could be administered from a bottle, or five or six drops might be placed on a handkerchief and held to the nose and mouth of the patient. An exceedingly convenient method of carrying the drug was by means of the nitrite of amyl bulbs suggested by Dr. T. A. McBride, of this city. When required, one of the bulbs could be broken in a handkerchief or towel, and its contents immediately inhaled.

Dr. Gouverneur M. Smith remarked that the question might arise whether the antidote was not a dangerous agent to employ.

Dr. S. Caro seemed to doubt the safety of the antidote in this instance, for the reason that one of his patients, who suffered from angina pectoris and was treated by the use of the nitrite of amyl in drop doses taken by the mouth, fell into a sort of collapse after the fifth dose, which he was quite certain would have proved fatal had not the influence of the drug been arrested by a vigorous administration of aromatic spirits of ammonia.

Dr. J. C. Peters doubted the correctness of the opinion that the collapse in Dr. Caro's case was due to the effect of the amyl, but was inclined to attribute it rather to the prostrating effect produced by the attack of angina.

Remarks were made by Drs. Peters, Taylor, Post, Baylis, Caro, Sell, and Downs

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NEW YORK COUNTY MEDICAL SOCIETY.

Stated Meeting, Sept. 25, 1876.

Dr. T. Addis Emmet, Vice-President, in the Chair.

Immediately after the nomination of officers, Dr. S. A. Raborg read a paper on

THE INDUCTION OF PREMATURE LABOR IN CONTRACTED PELVES: ITS NECESSITY AND SAFETY IN CASES ASCERTAINED PRIOR TO FULL TERM.

The paper consisted essentially in a report of three cases in which premature labor had been induced, but the interest centered upon the use of the *interrupted current* of hot water (110°F.) by means of a Davidson's syringe, instead of the continued current as obtained in the method of Kiwisch. In the first case the interrupted current was employed, two gallons of water were used each time, and the douche was repeated every three to five hours. Delivery was effected in five days and twelve hours.

The second case occurred in the same woman. The continued current was employed, the same amount of

water used each time, and the douche was repeated at about the same intervals. A Barnes dilator was introduced once. Delivery was effected in nine days and twenty-three hours.

In the third case the interrupted current was employed and delivery effected in five days and eleven and a half hours.

From the above, the doctor believed it was evident that the continuous current could not be relied upon as a sole agent to produce premature labor.

The action of the interrupted current was regarded as a sort of flagellation of the muscular tissue of the uterus produced by throwing against the posterior lip of the cervix a series of jets which would stimulate contraction in the entire organ. The secondary effect of the hot water was held to be stimulating, provoking contraction, as advocated by Dr. T. Addis Emmet. The advantages claimed for the method were that it could not possibly do any injury, and it did not require penetration of the os externum. It required patience on the part of the doctor, and it was assumed that the medical profession was noted in that particular.

In cases where rapid delivery was required, Barnes' dilators were regarded as invaluable.

The paper was received by the Society, and in the discussion that followed,

Dr. Isaac E. Taylor remarked that he had given up the douche as an agent to be used in the induction of premature labor, and knew of no method which could do its work quicker than that by means of Barnes' dilators. They could be used without harm to the mother, and at the same time they were safe for the child.

The discussion was continued by Drs. Caro and White. At its close,

Dr. A. McL. Hamilton exhibited a modification of the gas-jet cautery presented before the American Neurological Association by Dr. Putnam, of Boston (see Medical Record for July 15, 1876, p. 461). Dr. Hamilton has made such modifications as permits the gas to burn without noise, and the instrument can be obtained at a considerably lower figure than the Boston cautery.

The Society then adjourned.

Correspondence.

THE TREATMENT OF ASTHMA.

To the Editor of The Medical Record.

Dear Sir:—In No. 41 of The Medical Record, p. 653, Dr. Beard, among other interesting remarks, says:

"This theory (*i. e.* the nerve theory) led me to recommend central and local galvanization for hay fever before it was known to have been of practical efficacy in this disorder."

Without entering into any discussion as to the priority of advancing both this theory and the galvanic treatment of asthma, I will only mention the following facts. In 1870 I read before the Medical Journal Association a paper on asthma, in which I pointed out the neurotic nature of the phenomena of asthma (a neurosis within the sphere of the pneumogastric nerve), and advocated the galvanic treatment, at the same time giving as practical illustrations several cases of asthma successfully treated by me with the galvanic current. The article was printed in my Galvano-Therapeutics (published by D. Appleton & Co. in 1871, third edition, 1875, p. 140), to which I would refer the reader for further particulars (from p. 128 to p. 155). I may add that since then a considerable number of cases have corroborated my views, though they have led me to some modifications of the treatment, in accordance with the new facts which have accumulated.

Very truly yours,

William B. Neftel.

16 East 48th Street, New York,
October 7, 1876.

THE CAUSE OF CHOREA.

To the Editor of The Medical Record.

Sir:—Dr. G. T. Stevens, of Albany, at a meeting of the New York Academy of Medicine, held June 15th, advanced the theory that "Chorea. . . . arises from irritation dependent upon anomalous refraction of the eye, and in a very large proportion of cases to hypermetropia." I have collected eleven cases of chorea, the refraction of whose eyes has been examined by Dr. C. S. Bull, and the number of cases in which there is no error of refraction will be seen to be six. In seven of these cases there are causes existing which have been held by various authorities to be good and sufficient reasons for the chorea.

Wm. G.....	Hyperopic $\frac{1}{4}$ & Astigmatic.	14	Father a drunkard. In all probability masturbates.
Wm. D.....	Hyperopic $\frac{1}{40}$ to $\frac{1}{25}$.	8	Mother hypermetropic and wears glasses.
Mary E. R..	Hyperopic $\frac{1}{30}$.	12	No history.
Wm. H	Hyperopic $\frac{1}{48}$.	14	No history.
Mary D.....	Hyperopic in L Eye $\frac{1}{25}$ to $\frac{1}{48}$. R. Eye $\frac{1}{20}$ and Astigmatic.	11	Has a functional heart murmur at base.
Nora S.....	No error of refraction.	11	Heart beats very rapidly and has slight murmur, with systole above base.
Frank D.....	No error of refraction.	16	Admits masturbation.
Georgiana M	No error of refraction.	15	Father a drunkard and has an epileptic brother.
Louise R....	No error of refraction.	11	No history.
Albert K....	No error of refraction.	10	Had scarlet fever two months before access of chorea.
Nellie C.....	No error of refraction.	6	No assignable cause.

These cases are not enough to prove that error of refraction is not a frequent cause of chorea, but to show that it is by no means a universal cause. I hope to publish before long a larger number of cases which throw more light on the subject.

R. H. Nevins, M.D.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from Oct. 1st to Oct. 7th, 1876.

Hartsuff, A., Surgeon. Granted leave of absence for one month, with permission to apply for an extension of one month. S. O. 135, Dept. of the Platte, Sept. 30, 1876.

Williams, J. W., Asst. Surgeon. Relieved from duty in Dept. of Dakota, and to report in person to the Surgeon-General at Washington, D. C. S. O. 204, A. G. O., Sept. 30, 1876.

Brown, J. M., Asst. Surgeon. Assigned to duty at Fort Garland, C. T. S. O. 202, Dept. of the Missouri, Sept. 27, 1876.

Gardner, W. H., Asst. Surgeon. Granted leave of absence for four months, with permission to apply for an extension of two months. S. O. 204, C. S., A. G. O.

Buchanan, W. F., Asst. Surgeon. Granted leave of absence for four months. S. O. 206, A. G. O., Oct. 3, 1876.

Tremaine, W. S., Asst. Surgeon. Granted leave of absence for 30 days, upon completion of his examination for promotion. S. O. 202, C. S., Dept. of the Missouri.

Moffatt, P., Asst. Surgeon. Granted leave of absence for four months, with permission to apply for an extension of two months. S. O. 204, C. S., A. G. O.

Dickson, J. M., Asst. Surgeon. Leave of absence extended 15 days. S. O. 104, Mil. Div. of the Missouri, Sept. 28, 1876.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending October 7, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Sept. 30	1	22	12	2	13	34	6
Oct. 7	0	16	21	2	8	57	0

Spiritualism Exposed.—Recently there has been quite a sensation in "spiritualistic circles," by the exposure of a medium fraud in Portland, Maine. Doctors Gerrish and Greene, of Portland, were instrumental in bringing about the issue, and no small credit is due to their audacity and perseverance. The medium in question was a female, who after hiding herself behind a suitable screen in the corner of her parlor, was enabled to send out "spirits" for the inspection of her select audiences. Attired in the ordinary way, she would allow her skirts to be pinned to the floor, and while she was seated upon a stool, the lower portion of the screen being some distance from the floor, the audience were invited to satisfy themselves that the medium did not move from her position. Dr. Greene on one occasion, while the so-called spirit was moving around, asked it to shake hands. This request being granted, he firmly grasped the hand and found the spirit to be the medium herself, who struggled in a very unbecoming way to free herself. While Dr. Greene thus secured the medium, Dr. Gerrish quickly drew the screen aside and discovered the apparel of the lady in a heap at the foot of her stool and still pinned to the floor. The trick was then shown to consist in wearing undergarments, with which she could emerge from her external apparel with ease, and to all outside appearance without any disturbance. But, after all, this is the old story, whenever sensible and brave men are willing to take the pains to solve what would otherwise appear to be a mystery.

Treatment of Diphtheria.—The internal use of chlorate of potash in diphtheria was recommended by Vogel in 1860, in doses of from one-half to three scruples dissolved in water, in the twenty-four hours for children from one to five years of age. Hydrate of chloral was first used as a local application by Ferrini in last year's diphtheria epidemic in Tunis. Dr. Cesare Ciattaglia, of Rome, combines these two methods of treatment, and claims to have had remarkable success with them. He dissolves a drachm of hydrate of chloral in five drachms of glycerine, and applies it to the false membranes three or four times a day by means of a camel's-hair brush. Of the chlorate of potash he gives from two and a half to four drachms a day, dissolved in four and a half ounces of water, to children of from three to six years, and an ounce to adults. With these medicines he always combines a tonic and restorative diet. From the moment the chloral is applied to the false membrane it ceases to spread, and the characteristic fetor from the mouth disappears on the first or second day of its application. The chloral, when dissolved in glycerine, produces less of the burning sensation than when dissolved in water, and also remains longer in contact with the diseased surface. The Doctor gives the histories of eight cases, some of them desperate, that he treated in this way. All of them got well, and in a remarkably short space of time, the remedies being in no case used more than eight days, and in most only five.—*The Lancet*, July 1, 1876.

Poisonous Hams.—In a report recently submitted to the prefect of police of Paris, M. Bouchardat pointed out that in a specimen of ham, said to be imported from Cincinnati, the enveloping cloth was saturated with a yellow substance, that was proved to be composed of the chromate of lead, a most deadly poison. It was suggested in the report that particles of the yellow substance might become detached and be mixed up with the alimentary substances vended by grocers and others, and thus those who make use of them be exposed to the risk of poisoning. By a decree of the police the substances so enveloped were seized and buried under ground, and future supplies are to be treated in a similar manner. M. Bouchardat suggests that if American purveyors prefer to have yellow envelopes around their hams, they substitute for the chromate of lead, any other yellow substance, turmeric, for instance, which is known to be harmless.

New York Aquarium.—A very pleasant reception was given to a large number of the medical profession by W. C. Coup, manager, at the opening of the New York Aquarium on the evening of the 10th inst. The formal exercises consisted of addresses by Hon. R. B, Roosevelt and Prof. W. S. Ward. Dodworth's orchestra discoursed elegant music. A bounteous repast was served, and ardent students of ichthyology were numerous. A reading room and library are attached to the aquarium, and there is also a laboratory, where those who may desire can pursue original investigations regarding the habits and development of the finny tribe.

Sanitary Inspection of English Lodging-Houses.—The Council of the Social Science Association approves of the system of inspection of lodging-houses, but recommends that the measure be voluntary on the part of the proprietors, and that they be allowed to register their establishments as having the certificate of the sanitary authorities.

Original Lectures.

CLINICAL LECTURE ON ACUTE DIARRHŒA.

DELIVERED IN BELLEVUE HOSPITAL,

By W. H. THOMSON, M.D.,

PROF. OF MATERIA MEDICA AND THERAPEUTICS, UNIVERSITY MEDICAL COLLEGE, NEW YORK.

I HAVE chosen the disorders of the alimentary canal as the subject for the present Spring Course of Clinical Lectures, because these affections are so common that young practitioners may naturally expect to begin with them their medical experience, and our remarks to-day will refer to one of the commonest of them all, especially during the coming season, namely, Acute Diarrhœa. Chronic diarrhœa is usually as distinct from acute diarrhœa, both in its nature and in the treatment required for it, as chronic and acute diseases generally are distinct from each other; and hence we must defer its consideration for a future season.

The most frequent forms of acute diarrhœa may be divided, according to my conception of them at least, into two varieties; namely, those due to chemical causes, so to speak, and secondly, those due to nervous derangements. I would class under the first division the diarrhœas caused by acrid fermentative changes in the intestinal contents, which induce in the canal the same kind of drastic action which characterizes the operation of irritant cathartics. The other variety, or choleraic diarrhœa, begins as a painless, watery flux, but may rapidly develop symptoms of the most dangerous vital collapse, and whose interpretation is very difficult upon any theory of mere local intestinal irritation. The leading characters of these two forms, both as regards their etiology and their course, and also, I may add, as regards their treatment, are so different that it is well for us here to begin with discriminating them.

The causes which lead to the development of the first form of acute diarrhœa are generally quite easy to recognize. We should first bear in mind that the digestive juices proper, both gastric and intestinal, are equally endowed with a remarkable property which is necessary to, but at the same time distinct from, their digestive power, and that is, that one and all of them are very efficient antiseptics. Meat, milk, and other putrescible substances, when mixed outside the body with the gastric, pancreatic, or intestinal juices, will not only be acted upon by them, but will also remain without putrefaction or fermentative change for as long time as they will when mixed with some of our best reputed agents for preventing decomposition. When we consider that every morsel of food and each swallow of water, with the air which is mixed with both, must contain multitudes of the germs which induce fermentation or decomposition outside, and that the high temperature of the alimentary canal is peculiarly fitted for their development, it becomes plain that nothing but a free and constant supply of antiseptic agents can prevent the speedy occurrence of putrefactive processes. Were the gastric juice never so active as a solvent, yet this would avail little against the poisonous changes which the food would undergo ere there was time for the secretions of the stomach to complete their share of the work, and this difficulty of course would progressively increase with every foot of the tube beyond. The first effect, therefore, noticeable upon a suspension or a perversion of the digestive secretions, from whatever cause, is fermentation or decomposition of the contents of the canal. Lactic, acetic, and butyric acids, sulphuretted hydrogen, and ammonia, and other gases are formed, with the result of producing the most irritating mixtures that can well be imagined, and whose caustic action is manifested in the inflamed throat, nose, and lips, and the running tears which accompany their ejection by vomiting, or the excoriations about the anus when these matters are voided. This one consideration, that the antiseptic property of the solvent secretions is quite as necessary as their digestive power, and hence, that the absence of these secretions is dangerous, aside altogether from the danger of starvation, affords a very fair explanation of many troublesome fluxes which we meet in disease. The diarrhœa of typhoid fever and of phthisis, for instance, are not by any means due solely to a specific affection of the intestinal glands, because any rise of the blood heat is a cause of arrested or of diminished secretion, whether from the skin outside, to the kidneys, or the intestines inside; and let the fever-heat last long enough, and you may have the intestine bathed with decomposing irritating fluids, and "a colliquative" diarrhœa set in which differs in no respect from the flux of typhoid.

The symptoms of this form of diarrhœa are but the signs which the intestine must give under the circumstances. A great serous flow takes place to dilute the irritating fluid, just as acid in the mouth causes an abundant flow of saliva. Then comes a sense of uneasiness, followed by diffused soreness through the bowels, and soon some portion of the intestine becomes cramped in its hurried peristalsis. The patient feels the same as if he had taken a griping dose of colocynth or gamboge, and ere long he has an evacuation with a burning sensation, a discharge of flatus, and a sour or putrefactive odor, which show nothing so much as that for some hours or days he has not had enough gastric or intestinal juices for the proper change of the food, and hence it has changed into an intolerable cathartic. Those persons who become greatly prostrated or faint by medicinal cathartics are prostrated in just the same way by a single evacuation of a simple summer diarrhœa, and it is very common, on the other hand, to find some persons as much benefited by a purge compounded of acetic, butyric acids, etc., as by a well-mixed laxative from the apothecary. Their "biliousness" and muscular languor or pains go off, and they feel as much relieved by the one as by the other.

If a brief flux of this kind would in every case not only bring away the decomposed intestinal contents, but also remove the causes which primarily suspended or perverted the natural secretions, then there would be no need for treating this form of acute diarrhœa at all. But very often the original disturbing cause with the secretions continues to operate. The contents of the intestine, whether ingesta by the mouth or secretions from the blood (for the daily flow into the intestine of secretions has been estimated as equal to the mass of the blood itself), continue to decompose, and therefore, to renew the purging at shorter and shorter intervals, until inflammation or even ulceration result locally, and systemic depression generally. The patient, if he had ideas at first of a looseness of the bowels being a beneficial process of riddance from surplus bile, begins to wish to have it stopped. It is then that you should be in the best position to judge. The indications for arresting the flux are often urgent. We have quite a number of remedies which can directly restrain excessive intestinal discharges, and

often the sooner the bowels are "locked up" by them, the better. But on the other hand, this locking up is as often a mischievous practice. You only check, as by an insufficient dam, the flow, to have it break out again more uncontrollable than ever. The decision here as to the best course to pursue is generally very perplexing to the physician with his first patient. It is now, therefore, that a careful consideration of the causation and the nature of the diarrhœa has so much to do with the management of the flux, for success will depend more upon a proper judgment of how the trouble began rather than how it happens to continue.

Take, for example, the diarrhœa common with teething children. I have often suffered from toothache myself, with the invariable result of finding that an aching tooth can seriously disturb the stomach. It is not the pain alone which takes away the appetite, furs the tongue and brings on a qualmish dyspepsia, for the divisions of the trigeminus are allied through more than one branch with the gastric nerves, so that not only a frontal headache accompanies an irritated gastric mucous membrane, but, vice versa, a painful tooth will often in adults check the flow from the follicles in the stomach. It would seem, therefore, that we may infer correctly that the reflex irritation produced by one or by several teeth pushing their way through the narrow bony bed in the undeveloped jaw of infancy, may be severe enough to suspend the gastric secretion almost completely. Should this occur, the milk will soon be vomited with a very sour smell, and simultaneously with this symptom, you have plain evidence that something is producing pain and disturbance in the bowels. Irregularities of the local temperature, the unfailing signs of radiated intestinal irritation, first manifest themselves. The feet and hands turn cold and contract, the head becomes hot and the face streaked, and soon the vomiting is succeeded by an evacuation which has the same kind of fermented odor which is perceptible in the matter ejected from the stomach. There are other characters besides the odor to be noted in the passages similar to what comes from the stomach, such as the collections of undigested casein, but we would direct special attention to the sour smell for this reason. The gastric juice is itself acid, and hence, some may think that the taking of mineral acids to relieve the dyspepsia of a sour stomach, or to act as astringents in diarrhœa, is somewhat after the Hahnemannic principle; but in reality it is just the reverse. Though the gastric juice is normally acid, nothing that it is mixed with should *smell* sour; that is a certain indication of fermentative change caused by the deficiency, and not by the excess, of the proper acid. On the other hand the intestinal juice is alkaline, but still as effectual a preventive of fermentation as is the gastric juice, so that sourness of the digester is equally an evidence of a great deficiency in the normal secretions of the bowels, and due to the same cause, namely, arrest, through reflex irritation, of the functions of the digestive glands. The way to treat such a diarrhœa, therefore, will differ in several respects from the treatment of almost any case of diarrhœa in adults. The first thing to do is to put a stop to the nerve irritation, and for this purpose we may adopt several different procedures. One of the oldest and most familiar is scarification of the gums, an excellent measure if done when needed, and that is, only when there is hyperæmia of the gums. If they are swollen and hot, a few drops drawn from them by the prick of a lancet, relieves them greatly, on the principle that local bloodletting is one of the most effective vascular and nervous sedatives that we know of. We are utterly without an explanation of this fact, but the child is quieted in just the same way that the dreadful spasmodic dyspnœa of a thoracic aneurism is sometimes marvellously quieted by the trivial bleeding from two or three leeches applied at the top of the sternum, or the pain of pericarditis by the same at the precordium, or the irritable stomach in acute hepatitis by the same at the epigastrium, or the headache of meningitis, by the same applied to the mastoid processes. There is no support afforded by these clinical facts to the advocates of general bleeding, for the amount of blood taken in the case of aneurism, for instance, is too little to produce the slightest change in the sac or in its contents. But the cases where lancing the gums is called for are comparatively few. We should remember that the greatest aching usually accompanies the growing of the teeth through the bony canal, before they begin to encroach upon or irritate the gums at all, and hence, if the gums are neither red nor tumefied, you had better not attempt the operation, for it will be of little avail. The laity, and some physicians even, imagine that cutting the gums is for the purpose of making a way for the teeth to grow out; but a young gentleman, ambitious for a moustache, might as well prick holes in his upper lip to help the hairs appear, as the practitioner to think that a soft mucous membrane can really delay a growing tooth.

We have, however, in the bromide of potassium an agent which possesses an incontestable power of arresting reflex irritability. Its free administration lessens even normal reflex movements, as in winking; and if you are annoyed with excessive excitability in the fauces of patients whom you wish to examine with the laryngoscope, you can generally soon obviate this by giving half a drachm of the bromide. While the more the reflex irritability is morbid in its degree, the more effective will this agent be found. It is not an anodyne in the usual sense of that term, for I doubt if it relieves pain at all; but it certainly can prevent, by its paralyzing effects upon reflex processes, the toothache from disturbing travels to distant nerve distributions. Whether this theory, however, be correct or not, I nevertheless believe that I have found this drug exert a positive remedial action in the diarrhœa of dentition, given in five-grain doses every three hours or so, and my only explanation therefor is, that the gastric secretory nerves are allowed by it to return to their own business through its freeing them from the influence of the dental irritation. I need only mention also, that it is of special use in those numerous cases where slight irritations are apt to induce infantile convulsions or spasmodic croup. Another effective agent for calming the nervous symptoms, and thus restoring the stomach and bowels, is cold to the head. I have found the employment of Potters' hydrostatic bag, filled with enough ice-water to make a comfortable cushion for the child's head, act as nicely in checking restlessness and inducing sleep, as the most approved medicinal prescription. Cold water applied to the head directly, is objectionable for many reasons, so that if you cannot procure a water-tight receptacle like the one just mentioned, I would recommend your adjusting bottles of ice-water about the head, which should be protected first by a thin napkin or handkerchief. When you take into consideration the great disproportionate development of the brain and the nervous system in children, you will readily perceive the need there is for early attention to the deranged central circulation which is so apt to supervene in them, and which soon of itself must react upon the gastric and intestinal disorder. The paralyzing effect on reflex action of immersion in warm water is doubt-

less also the explanation of the benefits found from the use of the warm bath in these cases.

I am, however, in these remarks, anticipating the fulfilment of one indication which in most instances should take the precedence of all the rest. If you were called to treat a case of poisoning by some irritant, you would think first of freeing the stomach or bowels as soon as possible of the material which is inflaming the mucous surface, before you would administer anything else. But food once fermented in the alimentary canal is unfit to stay there a moment beyond it is possible to get rid of it, because it not only acts as a local irritant, but by its presence it arrests any proper digestion of matters taken subsequently, as it induces fermentation in them also. The reason why even the briefest attack of the kind seems to tell so quickly upon the muscular tone, the color and the strength of the little patients, is doubtless because, for the time being, all real feeding is arrested. The alimentary canal appears to stop renewing the supply at once, and after one day's continuance of the trouble, as great a change manifests itself in the child's condition as if it had been actually deprived of nourishment for the same number of hours. I have, therefore, never seen cause to regret my beginning the treatment of such cases with the nursery remedy of castor-oil, though I have seen cause to regret not doing so from a mistaken confidence in the previous purging having disposed sufficiently of the offending matters. We are apt to be too much influenced by the activity of the diarrhœa towards stopping the flux at once, lest it exhaust the patient. But it is scarcely possible to irritate the patient's bowels with the oil, however given, in comparison with the irritation which fermented cheese is capable of producing; and so often will the whole trouble promptly subside after a single good operation by this medicine, that I am inclined to recommend your beginning the treatment of infantile diarrhœa with it very much as a routine prescription. After it has acted, you may rely on your other measures with much more confidence than you have reason to entertain without it.

Another indication, present from first to last in the course of the complaint, is to supply the deficiency of the gastric juice by artificial substitutes. You cannot do any harm by pepsin and a few drops of muriatic acid; but you may be doing thereby just what is needed to prevent a repetition of the abnormal change in the food; and when there is much gastric irritability, the common addition of bismuth to pepsin is certainly indicated. As the friends generally dread too many prescriptions, and we are being constantly warned by a public, which many of our own teachers labor to inform, that it has been greatly overdosed by our unenlightened predecessors, you had better say that pepsin is no "medicine" at all, but a help to digestion derived from calf's or pig's stomach. The derangement of the digestive processes of course demands also that for a time the stomach be allowed to do less work. The heat of the mouth and fauces (especially after vomiting) increases thirst, on the other hand, so much that the child is likely to be nursed or fed altogether too often. Drinks of cold barley or rice water therefore, in spoonful doses, or equal parts of cold milk and lime water, are very properly recommended in your text-books, for the reason that with no real appetite, the patient should be relieved with drinks which will tax the stomach the least; otherwise, your best prescriptions may wholly fail.

Should you now find, say on the second day after beginning with the measures recommended so far, that the diarrhœa continues, and that the discharges are more watery or frequent, I would then begin with a combination of familiar correctives which I have found best administered in the form of a prescription given by Dr. West in his book on children's diseases. I will have something more to say on the action of rhubarb with alkalies in the diarrhœa of adults, but I may remark, that having once held the children's class in one of our city dispensaries, I made and recorded the results of comparative trials of various reported prescriptions for diarrhœa. The attendance during the hot months became inconveniently large, and I adopted the plan of giving the patients alternately as they came in, West's rhubarb mixture, and one or other of the usual mixtures containing sulphuric acid and laudanum, chalk mixture, ipecacuanha or astringents, notes being taken of each, and a promise exacted to report again. After six weeks' experience, the superiority of the rhubarb prescription appeared to me so certainly demonstrated that it has influenced me in treating summer diarrhœa in young and old ever since. West's prescription is this: ℞ Magnes. Sulph., ℥ i.; Tr. Rhei. ℥ ij.; Syr. Zingiberis, ℥ i.; Aq. Menthæ, ℥ ix. M. ℥ i. ter die for children a year old. You will note that there is no opiate in this mixture, and you should bear this in mind, for if you can check a diarrhœa of this kind without this drug, by all means try to do so. Instead of thinking of opium first, always think of it last, when the bowel trouble has maldigestion as its beginning, because opium is invariably a hindrance in children to the proper secretion of digestive juices. The indication for opium arises only when the discharges not only continue profuse, but also are evacuated with a suddenness which betokens excessive peristaltic action. In such a case the addition of a drop of laudanum to each dose of this mixture will generally suffice, for I prefer to give the sedative only in this combination, as the one least calculated to neutralize its interference with the digestive secretions.

(To be continued.)

Original Communications.

THE RELATION AND HEREDITARY TENDENCY BETWEEN INEBRIETY AND EPILEPSY.

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(Read before the meeting of the "American Association for the Cure of Inebriates," held at Philadelphia, Sept. 26, 1876.)

Very little attention has yet been paid to the relation and hereditary tendency existing between inebriety and epilepsy, although a very close relation undoubtedly exists between them. Careful examination reveals a large number of persons affected with epilepsy whose parents or ancestors have been addicted to intemperance. There is a very close analogy existing between the paroxysms of a dipsomaniac, where there is often a prodromic stage of nervous disturbance which may incapacitate the patient for mental labor, and the convulsions of an epileptic, whose paroxysms of intense nervous excitement are generally preceded by the "aura epileptica;" the difference being that in the former case the paroxysm lasts for weeks perhaps, while in the case of the epileptic it lasts but a few moments. As we often see the two diseases existing in the same person, it becomes impossible not to

infer a similarity of origin. We have in both instances accumulated and pent-up nervous force or irritation, which finally expends itself, in the one case in the unrestrained indulgence, in the irresistible impulse to indulge in alcoholic stimulants, and in the other in the convulsive movements of epilepsy. There would seem beyond all doubt to be a correlation of force which results in the mutual convertibility of these two diseases. It is not an unusual case to find in the various members of different generations of the same family different phases of the neuroses, such as insanity, epilepsy, phthisis, chorea, or inebriety, showing beyond all doubt correlation of morbific force in hereditary diseases. I believe most firmly that the morbid condition of nerve element, or morbific force induced by inebriety, is indelibly impressed upon or is transmitted to the ovum at the time of conception, and that this morbific force lies dormant in the system until developed by an adequate exciting cause, and that the hereditary neurosis thus often skips a generation, leaving no appreciable manifestation of its existence in the intermediate generation. When this morbific force *does* manifest itself, next to the transmission of the predisposition to inebriety comes unquestionably epilepsy. From my experience, the children or grandchildren, while infants, are generally affected with convulsions, which may prove fatal, but more often tend to assume an epileptiform type, as the child advances in years. I have repeatedly noticed, in patients who did not have complete epileptic seizures, *epileptic vertigo*, which passed off almost instantly, but which for the time evidently abolished consciousness partially if not entirely. The brain of such children is often morbidly active, and too high pressure in education, or an unnatural forcing process during the formation period of childhood, often results, especially in girls, during the period of constitutional evolution—a time at which the organism is under physiological conditions that predispose to pathological states—in disturbances primarily of the organs of respiration, circulation, and digestion; and secondarily, in the production of hysteria and epilepsy by over-stimulating a brain already morbidly active and predisposed to disease, upon the application of even comparatively trifling exciting causes. Again, consanguineous marriages may be the connecting link between inebriety and epilepsy. I have known cases in which the intermarriage of blood relations, where there was inebriety that had lain dormant for one or two generations, has resulted in the old hereditary neurosis reappearing in the form of epilepsy in the offspring. It is a curious fact, also, that the sons born as the result of the union of cousins in marriage appear to have a strong tendency toward inebriety. The only explanation which I can offer of such cases is, that it is probably the development of the latent morbific force residing in the constitution of the parents, who have a common ancestor, which has been lying dormant for one or two generations, and which is developed in the offspring as the result of the consanguineous marriage. I think that such latent morbific force and hereditary disease is far more common than we generally suppose, and that in many cases both insanity and inebriety are only the expression of latent disease, elicited by external, accidental causes, rather than as the result of moral or physical causes, to which they are attributed both by the laity and by the profession.

The epileptic convulsions occurring as the result of inebriety depend mainly, I think, upon a two-fold cause, which operates in the production of a morbid irritability of the medulla oblongata. Whether this be a transitory or a constant state, I think, is an open question. I am inclined to think that it is a *constant* state, which may, however, for the production of the epileptic paroxysm, require the additional stimulus of transitory cerebral irritation to be transmitted to the medulla oblongata, and perhaps the sympathetic. The two-fold cause which has appeared to me to operate in the production of what I take leave to term *alcoholic epilepsy*, consists, first, in hyperæmia of the brain, which causes symptoms of irritation due to increased excitability of the nerve filaments and ganglion cells of the brain, which, by transmitting to the medulla oblongata a morbid irritability, results in epileptiform convulsions. Second, a state of cerebral anæmia which also induces a morbid irritability of the medulla by causing arterial anæmia. Finally, I believe that as a result of inebriety we may have epileptic convulsions occurring merely from the state of nervous irritation produced in the medulla and at the base of the brain, which excites the motor nerves, from the poisonous and improper character of the blood plasma produced by the presence in it of alcohol. This I believe is often the case without either very marked anæmia or hyperæmia of the brain. This appears reasonable when we reflect upon the fact that the amount of blood going to the brain constitutes about one-fifth of the whole bulk of the blood. Consequently any poisonous or injurious change in the condition of the usual supply of blood must be very apparent in the encephalic condition, and produces cerebral irritation incompatible with the performance of healthy function.

There is in epilepsy, and more especially in epileptic insanity, a period which sometimes precedes and sometimes follows the epileptic paroxysm, in which often occurs an abrupt and complete change in the moral nature, so that we often witness the change from a sober, honest, and industrious to a dissipated, negligent, and lazy man. These attacks often recur periodically in the course of epilepsy, associated with more or less maniacal excitement. During these periods of moral alienation there has often occurred in patients under my charge an irresistible desire to indulge in alcoholic stimulants to excess, so that for the time the patient, if not restrained, would pursue a course of inebriety, his reason seeming powerless to control the temporary dipsomania. There is still another class of cases in which the moral insanity takes the place of the epilepsy or epileptic mania, as the case may be; and these cases are also very prone, according to my experience, to be addicted to inebriety, if the opportunity of gratifying their morbid impulse occurs. In my observations, and in my study of insanity, I am continually called upon to witness its connection with disease, and more particularly with the hereditary diseases; and I have come to believe, as I have endeavored to show, that inebriety and epilepsy are mutually convertible diseases. They both depend upon the morbific force before alluded to, which may remain latent in the nervous system for a long time between the intervals of its manifestation; and although there is a certain dissimilarity of the symptoms between the two diseases, it does not at all follow that they are owing to different causes. The fact of the hereditary disease appearing in different forms in members of the same family, and passing from one form to another, leads us to positively infer a correlation of morbific force which leads to this mutual convertibility, which includes not only inebriety and epilepsy, but also, I think, phthisis, skin disease, insanity, and scrofula, and perhaps rheumatism and gout. In my asylum practice I have had ample proof of this, in the existence of the different phases of hereditary disease

and their alternations, both in the same individual and in various members of different generations of the same family. With regard to the treatment of hereditary diseases, which I do not propose to take up in this paper, the chief indications, I think, point to hygiene and to wise marriages. As we have seen that the symptoms of constitutional disease are manifested soon after birth in convulsions or some affection of the nervous system, we must turn our attention to the nourishment and education of the child, and endeavor to exclude everything prejudicial to its future mental and bodily health. By such attention to hygienic rules are we, as physicians, to endeavor to secure an exemption in the rising generation from these hereditary diseases, so far as we may; and it is certainly our duty to aim at the eradication and stamping out of hereditary disease, which, if it is accomplished in the future, as we hope it may be, will complete the entire round of the possibilities of preventive medicine.

Epilepsy occurring in offspring as the result of inebriety in the progenitors is complicated with defects or disorders of the mind in various ways, and the manifestations may with propriety, I think, be classified as follows: 1st, epileptic idiots whose intellectual faculties have never been developed; 2d, epileptics who are imbecile or demented; 3d, epileptic maniacs, who, without obvious disorder of the mind, when epileptic fits are coming on, are irritable, morose, malicious, and dangerous, and sometimes perpetrate fearful crimes. In some instances the mental disorder takes the form of a paroxysm of acute mania, coming on suddenly. 4th. Epileptics whose intellects are not impaired.

Pathology.—The pathology of the production of epilepsy in the offspring of intemperate parents is very obscure. The condition of the mother during gestation, if abnormal, as in inebriety, cannot fail to interfere with the proper nutrition of the cerebral tissue of the fœtus; and it is in this way, I think, that during embryo life the brain of the infant often undergoes pathological changes, which induce both deficient moral power and epilepsy. It is certain that any pathological state which destroys the equilibrium of the functions of the organs of the mind, producing depression of some functions and excitement of others, cannot fail to produce in the children of such parents an ill-balanced and defective state of the nervous system, disposed to take on diseased action. It is probable that there exists in such children a state of the cerebral vessels which interferes with the uniform and healthy interchange of nutritive plasma, passing from the vessels to the brain cells, and of the fluid cell contents in a state of degenerative metamorphosis, passing from the brain cells to the vessels. This state of the cerebral capillaries induces a morbid activity of the cerebral cells, which is in all probability the determining cause of the epileptiform convulsions from which such children suffer. That the functional disturbance resulting in epileptiform convulsions in such children may be due to diverse causes—that is, to anæmia as well as hyperæmia—I have proved to be a fact, as I have found in two or three instances the brain and membranes completely bloodless in children who died in hospital in the midst of convulsions, although I think that the general rule in such cases is more often to find an excessive quantity of blood present.

After numerous dissections of the brains of epileptics, both in cases resulting from intemperance and in cases occurring under ordinary conditions, Foville and Andral agree in their testimony that there is no special lesion attending this malady. Andral insists upon the necessity of distinguishing between those cases in which death occurs in the interval and those in which the patient dies in a fit, as in the latter class of cases there will be congestion of the cerebral vessels, which is the effect and not the cause of the fit, as some might suppose. I have found that among the cases coming under my charge in which inebriety in the ancestors could be clearly traced as a predisposing cause, very few, if any, of the patients had been healthy persons previous to the accession of the disease. That in a great many instances, especially in women, hysteria and other nervous affections had existed previously, and that functional derangements of the nervous system had been of frequent occurrence since infancy. The pathological appearances which have been found by Schroeder van der Kolk in the medulla oblongata would seem to show that epileptic convulsions depend generally upon an increased afflux of blood to the medulla oblongata; although, as I have previously stated, it is a fact which has been proved by Küssmaul's and Tenner's experiments, by cutting off the arterial blood from the brain, that arterial anæmia is also a cause of epilepsy. Schroeder van der Kolk found that in the medulla there generally existed a dilatation of the arterioles and capillary vessels, with thickening of their coats. In the cases where arterial anæmia of the medulla is the cause of the epileptic convulsion, it is probably the effect—when it occurs in the inebriate—which the alcohol exerts in producing a transitory spasm of the muscular fibres of the arteries, with consequent arterial anæmia.

Prognosis.—In epilepsy occurring in the inebriate himself, as the result of the morbid irritability produced in the central nervous system by his excessive drunkenness, we may reasonably expect an ultimate cure if there is no structural change in the brain which has resulted from the course of inebriety. I have had three such cases of recovery in patients under my charge. On the other hand, when the disease occurs in the offspring of intemperate ancestors as the result of the hereditary tendency, it depends more certainly upon structural disease of the brain; and, as a general rule, the more frequent the recurrence of the epileptic convulsions in such patients, and the deeper the impression which they leave behind them, the less hope do I entertain of ultimate recovery.

OBSERVATIONS ON THE PHYSIOLOGY OF MENSTRUATION; WITH NOTES OF A CASE IN POINT.

By JOSEPH WORSTER, M.D.,

NEW YORK.

The contributions of Dr. Kraus, of Vienna (Austria), to the physiology of the prostate gland, afford such decided evidence of the importance of normal function of that organ to sexual competence, and establish such an undoubted homology between the sexual processes of the male and female, as indicated by the observations I shall presently describe, that I am emboldened to give a summary of his conclusions before entering upon subject matter of my own. The points established by Dr. Kraus are:

1. As long as the seminal fluid remains within the testes, vesicles, and other seminal passages, it is colorless, scentless, and has an appearance very similar to that of fresh honey while deposited in the comb. In this state its reactions are neutral.

2. It is only after it has quitted the passages and

arrived in the urethra that it acquires its white color and its peculiar faint smell.

3. During its passage through the prostatic portion of the urethra the prostate gland pours out its fluid, which colors the semen white, and confers upon it the property of coagulating on exposure to the atmosphere. As would be inferred from the last statement its reaction is now alkaline. On the other hand, semen taken from the vesicles is not subject to coagulation on exposure to the air, but continues transparent, colorless, and odorless.

4. In the absence of the prostatic fluid, the spermatozoa of the mammalia cannot live in the mucous membrane of the mammalian womb; but, with its assistance, they may retain their vitality for from thirty-six to forty hours *in utero*.

Dr. Kraus professes to have conducted his experiments very carefully, and to have repeated them with sufficient frequency to insure a high degree of certainty to his induction. I cannot profess to have observed with frequency as concerns the homologous functions in the female; for only one case in all my practice has ever offered the necessary opportunities for exact observation, and, on looking over the literature of the subject, I find no data to assist in forming a conclusion. For the present, then, so far as I know, our views of the relative functions of the ovaries and the womb in menstruation must rest on the testimony of a single series of studies.

The case was one of uterine inversion and consequent protrusion from the vagina; that is to say, the womb was completely turned, the body of the organ having descended through the cervix in such a manner that its internal surface was presented externally between the labia. I made repeated attempts to reinvert the organ, but the work was one of slow degrees, and had to be continued at intervals during four successive menstruations, as after each operation a lapse of some days was required to repair the damage from laceration, by pressure and other means employed to correct the displacement. Having prepared to operate one morning, with the hope of finally disposing of the problem, I observed, on exposure to the light, a deep red blush suffusing the whole surface presented to inspection, which consisted of course of the lining membrane of the organ. On making the necessary inquiries, and consulting my notes of the case, I found that the patient was within four days of the menstrual period; for during the treatment her catamenia had been regular, and the calculation could be readily and accurately made. I consequently desisted from operating, and observed the progress of the infra-uterine blush from day to day. It continued to thicken until it was about four lines deep, and had the appearance of a flattened mass of currant jelly retained in place by the decidua. Closer scrutiny revealed the fact that the mass was, in the main, an undoubted product of the utricular glands, and hence a true uterine secretion.

On the fourth day after the appearance of the uterine blush the jelly commenced to break up, and a thin, scanty, pink fluid began to escape from the orifices of both fallopian tubes. The proper menstrual discharge now commenced, consisting of course of the disintegrated uterine blush, commingled with the pink fluid oozing from the fallopian canals. The latter did not constitute more than a hundredth part of the whole discharge. I had, during the progress of the case, four opportunities for observing the process, and in neither instance was there any material variation from the details I have described, either as respects the precession by four days of the uterine blush, or as respects the relative quantities of fluid generated *in utero* and discharged from the ovarian aqueducts. Actual volumetry was impracticable under the circumstances, and I only express a judgment from ocular data when I state the ovarian to the uterine product as 1 to 100. What special part the infra-uterine secretion plays in, or in what manner it promotes, the phenomenon of fertilization, must remain as yet an undecided question; but when it is considered that the prostate gland in the male is the proper homologue of the womb in the female, the inference is, I think, a fair one that the uterine secretion acts as a menstruum, protecting the ovum, and that its absence would be followed by infertility. In the egg-laying animals, without exception, so far as I know, the oviduct supplies the menstruum, which is secreted by special series of glands near the junction of the tubes. In the rodentia, as I am informed by a gentleman who has made a careful study of their development, the womb is cleft longitudinally by a well-marked fissure during the youth of the animal, and commences as an enlargement of the tubes at their junction and a little above; while in the higher vertebrates, even at maturity, there is considerable variation as concerns the distinctness with which its bilateral structure is marked. The most important aspect of these observations, particularly to the practitioner, is, however, that they may serve as the basis of an intelligible theory of the various pathological states with which the gynæcologist has to deal. As a matter of fact, my observation has been that most forms of uterine displacement have their starting-point in catarrh. How catarrh has its origin, and its importance as a derangement of function, are things readily appreciated with a correct conception in mind of the fundamental importance of the glandular structure concerned in normal menstruation. Hyperæmia ensues, the uterine tissues become loaded and engorged with blood, the organ is distended and enlarged, and some form of displacement follows as a natural consequence. Anteversion is, I apprehend, rather the most common aspect of the lesion. Now, one of the necessary accompaniments of hyperæmia is distention of the arterial feeders of the hyperæmic organ, with more or less contraction or obstruction of the venous system, by pressure partly, and partly, I am inclined to think, by an original act of nature resulting from the tonic influence of irritated nerves on the coats of the venous vessels. The anteversion, by doubling the venous tubes upon themselves, still more materially obstructs the circulation, and so perpetuates the inflamed state. Ulceration, as one form of resolving inflammation, usually follows, if the patient is a healthy one. If not, the exudation, in place of being resolved in this manner, may take the form of a tumor, cancerous, or less malignant, depending on constitutional bias. It cannot be too firmly held in mind by practitioners that obstruction of the venous circulation, however slight, is, if long continued, always fraught with peculiar danger to the tissue in which it occurs; since the various products of decomposition that are ordinarily disposed of by oxidation become accumulated as local *materies morbi*, and must necessarily give a more or less malignant type to the product of the exudation.

It follows, then, as a matter of course, that the restoration of the venous circulation to its normal function is a condition precedent to the healthy resolution of the hyperæmia, or of any pathological product in which the consequent exudation may have resulted, either by suppuration or by absorption. In anteversion, incision peculiarly favors this essential condition, by straightening the flexed vessels, and by temporarily relieving the arterial pressure. The *rationale* of the operation

seems to me to be so simple and conclusive of its value, that I am inclined to recommend it, in cases of no very great severity, as about the only means of effectual and permanent cure. A slight hemorrhage, even, provided it has its origin in venesection, may be of great benefit to the engorged tissues.

115 East Thirtieth street, New York.

Progress of Medical Science.

On the Displacement of the Uterus by Distention of the Bladder.—Dr. Braxton Hicks recently read a paper on this subject before the *Obstetrical Society* of London, detailing the results of numerous experiments he had made on the dead body, in conjunction with Dr. Goodhart, of Guy's Hospital. The following are the conclusions he drew:

1. Distention of the bladder takes place first backwards towards the sacrum and then upwards. As a general rule, the uterus becomes retroverted when moderate distention has taken place, often so much so that it becomes horizontal. Further distention, though generally completing the retroversion, may distend the anterior wall of the vagina, and so tend to remedy the retroversion, but encourage flexion, more especially if the cervical attachments be firm.

2. If the rectum be full when the bladder is distended the uterus does not become retroverted, but is raised bodily in the pelvis in an axis more or less perpendicular to the plane of the brim.

3. If the vaginal portion of the bladder be relaxed, the vagina first becomes distended and the cervix uteri is carried backward. The uterus is then carried backwards and rendered vertical; at first it is somewhat anteverted, but ultimately raised out of the pelvis in a nearly upright position.

4. If the uterus is at first retroverted and the vaginal portion of the bladder is first distended, the retroversion is restored.

Dr. Williams, in some similar experiments made in 1873, found that the uterus became *anteverted* when the rectum as well as the bladder was distended. Dr. Hicks thought that this was due to the distention of the rectum being artificial and producing an elastic pressure such as never could arise from a collection of fæcal matter.—*The Obstetrical Journal*, August, 1876.

Poisonous Properties of Glycerine.—M. Dujardin Beaumetz, having noticed the tendency to employ glycerine internally, in the treatment of diabetes for instance, and believing that it ought to be reserved for external use, was induced to investigate its effects on the economy when administered in large doses. Berthelot has shown that this substance is a triatomic alcohol, and it should consequently produce effects identical with those of alcohol. The following are the conclusions he has derived from his experiments:

1. When chemically pure glycerine is introduced under the skin of a dog in quantities of from 2 to 4½ drachms for every 2¼ pounds of the weight of the body, it causes death within twenty-four hours.

2. The symptoms of acute glycerism resemble, within certain limits, those of acute alcoholism.

3. The necroscopic lesions of acute glycerism are analogous to those of alcoholism, which leads to the supposition that the toxic actions of the two substances are very nearly the same.

4. From a therapeutic standpoint, the introduction of large quantities of glycerine into the body is not devoid of danger.

It is necessary, then, to use care in prescribing glycerine for internal use, and not to lose sight of the fact, that, like alcohol, glycerine will prove a successful or an unsuccessful remedy according to its dose and mode of administration.—*La France Médicale*, August 2, 1876.

Pregnancy and Traumatism.—The Record recently published an abstract of M. Guéniot's interesting paper on the "Influence of Traumatism on Pregnancy;" in a more recent paper M. Guéniot considers the influence of pregnancy on traumatism. The following are his conclusions:

I. As a rule, pregnancy exerts no unfavorable influence on the traumatism. Contusions and wounds, luxations and fractures do not present a larger percentage of mortality in pregnant women than in other classes of humanity; healing takes place according to the manner and within the limits of time proper for each variety of injury.

II. To this rule the following exceptions must be noted:

1. When the traumatism implicates the genital zone, its course may be retarded or complicated, or its termination aggravated by the condition of pregnancy.

2. The same must be said of injuries of the lower limbs, or of any region that may be the seat of vascular alteration, after the third month of pregnancy.

The complications to be guarded against in these cases, are: hemorrhage, angioleucitis, erysipelas, gangrene, and ulcerative atony.

3. Although cases of ununited fracture during pregnancy are exceptional, this condition certainly does seem to some extent to retard the formation or the solidification of the callus.

4 In cases of complicated pregnancy (especially when the complication predisposes to premature delivery), traumatisms, by exciting miscarriages, acquire indirectly an altogether exceptional gravity, for the woman is then exposed to the various dangers of parturition (hemorrhage, metro-peritonitis, uterine phlebitis, &c.).

III. The post-parturient state does not interfere with the regular cicatrization of wounds or consolidation of fractures, provided the lesions were contemporary with the pregnancy or the parturition. The exceptions to this rule must be attributed to an implication of the genital zone, or to the existence of milk fever, or to a general or local morbid predisposition on the part of the patient.

On the other hand, injuries received during the post-puerperal period seem to possess a peculiar gravity. Hence the necessity for deferring non-urgent operations on the genital zone or lower limbs for some three or four months after confinement.

IV One of the modifications engendered by pregnancy consists in a quantitative plethora, and as a consequence the globular hematosis is restricted to a degree that exalts the plastic force necessary for the reparation of wounds. It is to this sarcogenic property that the rapid increase of some malignant tumors during pregnancy must be attributed.

V. Finally, it follows from the above, that surgical operations during pregnancy are not as dangerous as they are generally supposed to be, and that in case of a rapidly growing, malignant tumor, extirpation or amputation, and not premature delivery, should be resorted to.—*Le Mouvement Médical*, July 8th.

The Influence of Purgatives and of Inanition on the Proportion of the Red Globules of the Blood.—At the meeting of the *Société Médicale des Hôpitaux*, on July 14, M. Brôuardel read an interesting

paper on this subject, of which the following is a *resumé*. A marked concentration of the blood follows the use of a purgative that occasions from one to four evacuations. Within the first twenty-four hours there is an augmentation of from 200,000 to 1,000,000 in the number of red globules contained in a cubic millimetre of blood. This augmentation may even precede the first alvine evacuations. After twenty-four hours the proportion of globules returns to what it was before the administration of the purgative. The white globules are sometimes increased, sometimes diminished in number, apparently following no fixed rule. The immediate effects of purgation then, is to concentrate the blood by depriving it of its serum ; but this effect is not lasting. It is necessary to bear this effect in mind when considering the curves in the variations of the globules in the course of disease

Inanition produces to some extent the same effects. M. Lépine has proved that during the first days of life the infant lives on the serum of its blood, and the number of globules in a given volume of blood is consequently increased; after a few days it begins to nourish itself with milk, the serum is reproduced, the globules neither increasing nor diminishing in number, and the proportion between the globules and the serum is changed. The same process is met with in the adult. M. Brôuardel had under treatment a man, 48 years of age, who by mistake had swallowed a mouthful of sulphuric acid. The patient vomited immediately everything he ate or drank, though there was no stricture of the œsophagus. At the end of four months he died, actually of inanition. The autopsy revealed a cicatricial stricture of the pylorus, which would hardly admit a probe. Two days before death the numeration of the globules had given the following results: red globules, 4,849,395; white globules, 7,852. The blood was so concentrated by the loss of its serum that it was viscid and as thick as syrup. It follows, then, that to make a man plethoric it is sufficient to purge and diet him.—*Gazette Hebdom. de Méd. et de Chir.*, August 4th.

Colles' Fracture and Dr. Carr's Splint.—Dr. H. Martin says that he has in six years treated about forty-five cases of fracture of the lower two inches of the radius with Dr. Carr's splint, and that in none of these could any deformity be recognized at the time the apparatus was removed. Many of these cases were seen years after the injury, and in not one was he able to detect, by any deformity, which arm had been injured. Dr. Carr, a physician practising in New Hampshire, invented his splint in 1843. It consists of a strip of light wood, one-sixth of an inch thick, eleven and one-half inches long, and two inches wide, on which is laid a carved wooden bed, the irregularly convex surface of which is exactly adapted to the concavity of the anterior surface of the radius. An oblique cross piece, round, four inches long, and one inch in diameter, is attached to its distal end. The inventor's idea was that, the radius being a much curved bone, treatment of its fractures on a perfectly flat splint could only result in more or less deformity of the bone itself and in such a change in the relations of its lower articulating surfaces as must necessarily induce more or less impairment of the symmetry and usefulness of the wrist. In a splint recently invented by Prof. Gordon, of Dublin, the concavity of the radius is recognized as an indication for treatment, but the convex bed is applied to the *side* of the bone, and not *under* it. In preparing the splint for use, four thicknesses of cotton sheeting are laid on its upper surface, and the lower surface of the forearm is then laid on this and secured by a few turns of bandage. If the patient now grasp the cross bar as strongly as possible, the action of the hand itself will, in a large proportion of cases, reduce the fracture; a light splint, eight or nine inches long and two inches wide, is then applied to the back of the arm as low down as the metacarpal junction, and a bandage applied from the middle of the metacarpus to the proximal end of the splint. Of course the fracture may, if desired, be reduced before applying the palmar splint. After a week the bandage need not extend below the carpus; but this joint should then be firmly bound to the palmar splint by a strip of plaster. The cross bar keeps the hand inclined to the ulnar side, while at the same time the patient has free use of the fingers, and later of the entire hand. It is not necessary to remove the bandage at all during the course of treatment, except it may be necessary to tighten it. When properly applied, the pain is entirely relieved very soon after the arm is "put up." The great advantages of this splint are that it relieves the patient of much discomfort and disability and leaves the hand ready for use and free from stiffness when the fracture is sufficiently consolidated for its removal. It is also admirably adapted to secure perfect rest of the joint in cases of sprains of the wrist.—*Boston Med. and Surg. Journal*, August 17th.

Rabies successfully treated by Woorara.—The *Veterinary Journal* for July states that Offenberg, in his recent inaugural dissertation at the Berlin Hospital, reported the case of a girl, twenty-four years of age, who was taken with the symptoms of rabies eighty days after being bitten by a dog supposed to be rabid. Injections of morphine and inhalations of chloroform having been used without benefit, seven injections of woorara, amounting in all to three grains, were given in the course of five and a half hours. First, the muscles became steadier, and the convulsive seizures less frequent, then the dread of water and the photophobia disappeared, and the voice improved. Some symptoms of paralysis now appeared, which reached their maximum the next day. On the second day there was a slight relapse of the symptoms of rabies, which was checked by an injection of a little less than half a grain of the woorara. The patient recovered slowly; a certain degree of weakness and sluggishness, and especially weakness of sight, remaining at the end of two months. There was inflammation, but no suppuration, at the points of injection.—*Medical Press and Circular*, July 12th.

Syphilitic Infection of the Mother through the Child.—A short time ago, M. Diday, of Lyons, read a paper on this subject, in which he maintained the following point: syphilis may be transmitted from the father to the mother through the agency of the child. In the cases adduced by M. Diday in support of this theory, the disease was first manifested in the mother by the occurrence of secondary symptoms, no initial chancre having existed. The child begotten by a syphilitic father, without actual lesions, may infect the mother at any period of its intra-uterine life; either when it is in the condition of an ovule, or of an embryo, or of a fœtus. M. Diday admits the rarity of syphilitic infection by conception. The immunity is frequent, perhaps, because of an anterior syphilis, either evident or concealed, but often, probably, because the morbid influence is of a feeble nature. The morbid impression which the mother has sustained enables her, in these latter cases, to nurse her child without danger of infection, while, on the contrary, a strange nurse would be in great danger. M. Diday will continue his researches, and hopes to be able to present a complete solution of the question at the next session of the Society.—*Gazette Hebdom. de Méd. et de Chir.*, September 1st.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

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PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, October 21, 1876.

THE FEVER OF THE CENTENNIAL EXPOSITION.

So many people who have visited the Centennial grounds during the past few weeks have been affected with a low grade of fever and diarrhœa, that there does not seem to be much difficulty in associating the two circumstances in the relation of cause and effect. Upon what this disease depends is still an open question. Those gentlemen who have attended cases in this city are inclined to believe that the water supply at the Centennial is tainted by sewage. They maintain that it bears a striking resemblance to those cases which occurred many years ago in the Willard Hotel, at Washington, and more recently at the Lake Mahopac Hotel; in fact, that the fever is just such an one as would be caused by contaminated drinking water. If this can only be proven we have a clear case at once, and are ready to call the commission having the sanitary affairs of the grounds in charge to account. Taking the *post facto* line of argument, we certainly have a right to presume that something is wrong with the sewage, either in the grounds themselves or in their immediate surroundings. A distinguished medical gentleman of this city has allowed such a presumption to take so much the force of a conviction, that he has given the homely yet appropriate title of "cesspool" to the class of fevers to which he says the one in question belongs.

It does not behoove us to jump at conclusions before we are in possession of some of the facts upon which they may be based. We naturally hesitate to believe that any commission having charge of the drainage of the grounds should so far neglect their responsibilities as not to take every precaution against soil contamination and polluted drinking water. This is, indeed, so strong an argument against the general theory of faulty sewerage, that in the present absence of facts we are inclined to seek for other explanations; at least we are exercising ordinary charity in giving any other probable causes, for at least the majority of the cases of so-called "Centennial Fever," serious consideration. We must take into account, in the first place, that fevers are apt to prevail during the autumn months, particularly after an extraordinary dry summer. Why this is so is in some degree explained by the long exposure of the beds of partially or wholly dried streams to the long-continued action of the sun, and the subsequent washing of contaminated watersheds by the heavy rains. Since it is the fashion to look to the character of the drinking water as one of the principal sources of fevers, it is at least fair to estimate these telluric conditions as of some account.

Again, sight-seeing is a very serious business by itself. One of its principal effects is a rapid and marked prostration of the nervous energies. The stranger from the country who goes to Philadelphia keeps his mind continually upon the strain, either to understand everything he sees, or yields himself to the excitement of continual admiration. The result is sometimes quite astonishing. The sturdy farmer who, when at home, can follow his plough from sunrise until bedtime, becomes exhausted after a few hours' stay at the Fair. He is, for obvious reasons, more apt to suffer in this respect than the blasé metropolitan, who is hardly astonished at anything, and who is inclined to take things easy. Add to this the tire of long journeys from home, insufficient rest, indifferent and irregular meals, the constant drinking of water, or, worse still, of the insipid and sloppy beverages which attract the more curious appetites, we have a reasonable explanation for many cases of diarrhœa, with attendant fever.

Some physicians who have visited the grounds, and who have enjoyed the means of observation, are inclined to explain all the cases of sickness on this account, while others as positively assert that the great majority, if not all the cases of fever are of a typhoid type, and are unquestionably due to the usual causes of that condition. This latter view is certainly quite well sustained by the persistency of the diarrhœa, its intractibility to treatment, and the alarmingly high average of mortality. At all events, it is wise, in view of the public anxiety, to use the greatest discretion in advising our friends and patients who intend to visit Philadelphia.

If we are not yet prepared to state positively that the main source of danger is in the water, we can at least err on the safe side by advising as little use of it as possible, except after having been boiled, or taken as in tea or coffee. Some physicians, in fact, have gone so far as to recommend the people to carry drinking water from their homes as a part of their necessary baggage. This is certainly sound practice, and will commend itself to the good judgment of all who wish to use every means of prevention which is in their power.

Referring to our belief that the subject of actual

causation of this peculiar fever and diarrhœa is still *sub judice*, we take occasion to say that we have sent a commission to Philadelphia to make a thorough sanitary survey of the Centennial grounds, to examine its source of water supply, the character of the drainage, and to study the fever as to its type, particular symptoms, and lesions. In our next issue we hope to present our readers with the results of such investigations.

Reports of Societies.

INTERNATIONAL MEDICAL CONGRESS.

SECTION OF OTOLOGY.

The Section met Monday afternoon, September 4th, at two o'clock. Dr. Laurence Turnbull, of Philadelphia, Chairman, and Dr. Charles H. Burnett, of Philadelphia, Secretary, as an act of courtesy to the visiting members, resigned their positions in favor of Drs. C. J. Blake, of Boston, and H. N. Spencer, of St. Louis. Dr. Blake returned his thanks for the honor.

EARLY TREATMENT OF AURAL DISEASES.

Dr. Albert H. Buck, of New York, Reporter, read a paper on the subject of the Treatment of Aural Diseases in their early stages, especially when arising from the exanthemata. His remarks were based exclusively on affections of the middle ear associated with the formation of pus. He stated that chronic purulent inflammation of the middle ear is a common affection among the individuals of a community; that the serious nature of this form of disease oftentimes impairs the hearing very markedly, and occasionally terminates in death. Hence, the great importance of preventing an inflammation of the middle ear from becoming chronic—for every chronic case (the tubercular, perhaps, excepted) must have originated in an acute inflammation. The anatomical relations of the middle ear afford an explanation of the serious results that may follow an acute inflammation of these parts, and also indicate what is the most important point to secure in treatment, namely, the relief of tension and pressure. This being the one thing needed, the writer called attention to the impotent nature of the means commonly employed for the relief of such an inflammation. He then referred to the great value of paracentesis of the membrana tympani as a preventive of chronic purulent inflammation of the middle ear, and all its serious consequences. Statistics from his own experience were given to show the value of this operation. The general practitioner was urged to acquaint himself with the use of the speculum and mirror, as means of ascertaining accurately the condition of the ear.

In the discussion that ensued on the subject of chronic discharges after scarlatina, Dr. Burnett asked whether there was anything specific that would cause so much chronic disease, or whether it was the result of neglect. There was nothing morbid that was necessarily productive of it, but the main disease being in the throat in scarlatina, the ear was neglected; the child being very young, no examination would probably be made. Dr. Buck's paper was addressed to general practitioners rather than to aurists.

TESTS FOR HEARING.

On Tuesday afternoon, Dr. Burnett, Reporter, read a paper on "The Best Means of Testing the Hearing," embracing a consideration of the character of the three principal tests (the watch, the tuning-fork, and speech) in use among aurists; deficiencies and discrepancies in the hearing power of the diseased ear, with the inquiry whether disease can be diagnosed by the manner in which an ear hears certain tests; and the manner of testing, including the importance of isolation of the better ear, during the test, in one-sided deafness, and a consideration of what is needed for any form of test, with conclusions favorable to the human voice as a means of diagnosis. These last were adopted by the Section after full discussion.

ARTIFICIAL DRUM-MEMBRANES.

On Wednesday, Dr. H. N. Spencer, Reporter, read a paper on "In What Percentage of Cases do Drum-Membranes Prove of Practical Advantage?" After reviewing the history of the artificial drum-membrane, he considered the condition of the ear admitting of its use; contra-indicating conditions; the forms of artificial drum-membranes (under which head a preference was stated for Yearsley's cotton-wool); and the offices performed, functional and therapeutical. When the conditions are the most favorable, it was claimed that the cases are the fewest in number where the artificial drum-membrane will be worn, whether the reasons be objective or subjective.

The conclusions of the Reporter, adopted by the Section, after considering the various forms of artificial drum-membrane in use, were that the cotton pellet is preferable for its greater simplicity and easier introduction, and the greater uniformity of its effect, and comparative safety in its employment; and that it possesses the advantage that it is a valuable means of treating the tympanum, a great future being in store for it as a therapeutic agent. It was also urged that the continued use of an artificial drum-membrane for improvement of the hearing is indicated in rare conditions which can only be determined by the aural surgeon. In the full and interesting discussion that ensued, the view was advanced by Dr. Burnett that improvement might be due in these cases to a certain amount of traction rather than of pressure on the malleus and chain of ossicles. Dr. Turnbull held the view that all foreign bodies within the tympanum were likely to induce increased irritability and inflammation. He could not understand how a piece of cotton could be attached to the inner edge of the perforation so as to make an inward traction.

THE HEARING OF SCHOOL-CHILDREN.

On Thursday, Dr. C. J. Blake, of Boston, Reporter, read a paper on "What is the best Mode of determining the Hearing of School-Children, and How should partially Deaf Children be Instructed?" He stated that the need for some provision in our public school system for the better instruction of partially deaf children is shown by the fact that while the number of cases of impairment of hearing in children is much larger than is generally supposed, the task of compensating for this defect is left entirely to the individual judgment of the teacher. From analysis of cases in children during school life, the writer made two general divisions of cases in which partial deafness is a symptom: those in which the hearing is so far impaired as to interfere with acquirement of articulation, and for which special instruction is absolutely necessary; and cases of partial deafness, from very slight impairment of hearing to the grave

defect included in the first division. For education of children under the first division the writer proposes the use of the system of visible speech successfully employed in the public school for education of deaf-mutes and semi-mutes in Boston. For children belonging to the second division, the advantages to be derived from association with hearing children, and disadvantages arising from creation of an additional department for instruction, are sufficiently great to favor instruction in mixed classes, compensatory advantages, however, being accorded to the partially deaf. To accomplish this it is necessary to determine the degree of deafness, by the establishment of simple rules for testing the hearing, examples and forms for which were given by the writer, to be used by teachers, or, better still, by competent professional examination, made by a medical supervisor of public schools; the creation of such an office, and its importance in relation to this subject as well as to general school hygiene, being strongly urged.

AURAL VERTIGO.

On Friday, Dr. Burnett read a paper on "Aural Vertigo with Variable Hearing," which created some discussion. The general opinion was that this form of vertigo might occur without permanent defect of hearing in those who were greatly fatigued or overworked, and that quinine diminished the amount of tinnitus aurium, instead of increasing it. The paper was based on a case accompanied with dizziness, nausea, vomiting, tinnitus, and variable hearing. It was argued that this differed from true labyrinthine disease, for then hearing was permanently lost, and that the case was probably caused by muscular spasm compressing the bones. Treated with bromide of potassium, followed by iron and quinine, the case got well. Several instances were mentioned by other gentlemen of true Mènière's disease, in which the good effects of sulphate of quinia and sulphate of cinchonia, even in severe forms of the disease, were marked, relieving all the other symptoms except deafness. One case was reported as having been seen in the wards of Prof. Charcot by Dr. Weir Mitchell in a recent visit; another in the practice of Dr. Turnbull.

CATARRH OF THE EAR.

A paper was also read by Dr. Samuel J. Jones, of Chicago, on "Modifications in the Treatment of Chronic Non-Suppurative Catarrh of the Middle Ear," in which the writer advocated the injection of slightly alkaline solutions or solutions of chlorate of potash into the Eustachian tube; and by Dr. Laurence Turnbull, of Philadelphia, on the "Proper Selection of Schools as well as the best Method of Instructing the Deaf and Dumb."

THE DEAF AND DUMB.

He alluded to Bell's method of visible speech as giving the pupil a knowledge of concealed parts of the mouth and throat used in articulating, and of the movements of each part, so that he is better able to gain conscious control over them. The method interests him in the practice of the elements and combinations, which gives him great power over his organs of speech, and obviates the necessity of informing him that a sound is wrong if it is not the one the teacher wishes to obtain. The symbolizing of odd sounds also leads the pupil to think and study about the parts of the mouth that produce them. If a child can hear sufficiently well to understand the teacher when near him, the ordinary school is decidedly better than a special school for him. Children sometimes become deaf after learning to talk and to read; these may profitably attend an ordinary school, provided the parents or teacher will take time to explain their lessons; if this is not done, the child often recites "parrot-like," without understanding what he has learned. This has been the experience of teachers of deaf-mutes, even when the pupil has learned to read the lips quite well. Congenital deaf mutes attending an ordinary school may learn to write, or rather to copy, and may perhaps get some ideas of numbers; but the teachers do not know how to reach their pupils' minds, even if they had the time to teach them. Advantage, however, is gained for deaf children in mingling as much as possible with those who hear.

After alluding to other points, Dr. Turnbull stated that if children are too deaf to profit by the instruction of the common school, and yet have had sufficient hearing to have through the ear acquired speech, instructors of the deaf are nearly or quite unanimous in the opinion that such should be taught by articulation and lip-reading, and the attempt should be made if possible to teach every deaf child in that way. Many of our congenital mutes speak so as to be understood by strangers, and will, we expect, make speech and lip-reading a successful means of communication throughout the world.

The paper was approved and referred to the Committee of Publication.

EFFECTS OF COLD WATER ON THE EAR.

Dr. Turnbull next introduced, as a practical subject for discussion, the effect of bathing, swimming, etc., as causes of aural disease. He considered these acts in cold water as an important and frequent cause of aural disease. Bathing in river or sea water is, when wisely and properly regulated, both healthful and pleasant. The result may be inflammation of the lower portion of the auditory canal and of the interior surface of the membrana tympani. The greater evil is sudden deglutition during diving or swimming while the mouth, nose, and pharynx are filled with cold water; the mouths of the Eustachian tubes open by the cold, and a portion of the water passes into the middle ear. This result is apt to occur in young beginners, but may also occur in old and experienced swimmers, owing to intense coldness of the water, while plunging head-foremost, the act of deglutition being entirely involuntary. Acute cases from swimming and diving occur during the summer months and chiefly in young boys, from eight to sixteen, a much smaller number occurring in the fall and winter. Unless the acute form is promptly treated, it is always followed by perforation of the membrana tympani, and discharge of shorter or longer duration. In cases not recognized, symptoms of violent headache, furious delirium, and coma create the impression that it is a cerebral disease, and it is so treated. In its first stage it is an acute inflammation of the mucous membrane of the middle ear, followed by effusion, and, after twenty-four hours, by pus. It is invariably attended by fever, with swelling and inflammation of the naso-pharyngeal space, and great pain. The indication is to remove this fluid or pus by an incision of the membrane, followed by the use of the air douche and hot water, and the ear is thus saved. The patient remains deaf for several weeks, and the local application of tincture of iodine, with or without some anodyne, around the back of the auricle, facilitates removal of the thickening. To diminish the discharge of pus, should it continue, employ powder of salicylic acid and starch blown into the meatus, and after a time washed out and dried, and reapplied twice a day.

The subject was discussed by every member present, and the conclusions were mainly adopted by the Section that the bad effects are brought about by sudden inhalations of cold water into the middle ear.

The Section then adjourned *sine die*.

Correspondence.

IODINE INJECTIONS OF THE HYPERTROPHIED PROSTATE.

To the Editor of The Medical Record.

Vienna, *Sept.* 20, 1876.

Sir:—The reported success of Heine of Prague, backed up by his six published cases of alleged cure of hypertrophied prostate, seems alike so brilliant and so encouraging, many a surgeon has doubtless waited with some impatience for fitting opportunities to show his triumph.

It may be scarcely necessary to state that the method of treatment recommended by Heine consists in the use of iodine, not simply in the manner so long ago proposed, but by injections into the body of the hypertrophied prostate. Heine claims for this treatment: 1st, that it does not cause suppuration nor undue irritation; 2d, that it induces diminution of the hypertrophy, and of course the bladder trouble consequent upon it. The little operation proposed for the cure of this grave disorder is so simple, the success to be anticipated seems so probable and so complete, that I think it important to show that in the hands of others than the author of the method, the results may be less brilliant, that in the most accomplished hands, indeed, this treatment may cause undue irritation, suppuration, and death.

Prof. Dittel, of the general hospital here, whose experience in diseases of the urethra, and particularly of the prostate, is probably unsurpassed, has not been slow to try the method of Heine, and as the following case has been under my own daily observation during the greater part of its history, I have been perhaps the more impressed with its warning.

The patient entered Prof. Dittel's wards the 21st of last November, with simple hypertrophy of the prostate, was easily relieved by the catheter, and was otherwise in good condition. The case was thought to be a good one for the method in question. Accordingly the solution as recommended by Heine, containing pot. iod. ʒ ij., tinct. iodine ℥ ij., aqua dest. ʒ ij., was prepared, and four drops of it at two different times, and a few days apart, were injected into the body of the prostate. No irritation or reaction followed immediately; but before the time for the third injection, inflammatory symptoms showed themselves. Fluctuation was afterwards detected in the prostate and the abscess opened. The inflammation continued to increase and spread; peri prostatitis, peri-urethritis, and peri-urethritic abscess supervened; peri-proctitis bringing up the rear of this long, unpleasant train. On the 13th of January it became necessary to perform supra-pubic puncture of the bladder, which afforded not only temporary relief, but induced considerable general improvement, never enough, however, to allow the supra-pubic route to be dispensed with. The battle was fought with bravery and great patience by both surgeon and patient; there was certainly not another case in all the wards the management of which was so troublesome and tedious. The patient gradually sunk under his many complications, however, and on the 10th of July died.

On examining the prostate, I found the seat of two old abscesses corresponding to the points where the injections had been made. The other lesions were recorded as "suppurative prostatitis, peri-prostatitis, cystitis, pyelitis, and nephritis."

I am informed that in the other instances also in which Prof. Dittel has tried this method, abscesses had resulted. My friend, Prof. Dittel, certainly is more than satisfied not to try the method again, but to leave it to others with a different experience.

Having seen in the New York Medical Record (which, by the by, is distinguished for its regular appearance on the files here) an account of the success of this method, as well as its freedom from danger, it is not unlikely that some of its readers may be tempted to incur unwittingly risks almost as disastrous to themselves as to the patient. And while I do not presume to condemn the treatment upon the limited evidence in hand, I think it important to add, and that without delay, the facts as above given, which without comment serve exceeding well to illustrate the other side of the question and to teach a caution which cannot be too carefully observed.

Benjamin Howard, M.D.,
Late Prof. of Surgery Univ. Vermont.

HYPERMETROPIA AND CHOREA.—A REPLY TO DR. STEVENS.

To the Editor of The Medical Record.

It is almost unnecessary to say more than a few words in reply to Dr. Stevens, whose letter appeared in the Record, Sept. 30th. He has presented an altered extract from one of Anstie's lectures (London *Lancet*, May 10, 1873) to prove that I have not said "very much," as he is pleased to express it, in regard to the etiology of chorea. I do not claim to have said more than is sufficient to account for the causation of the disease, and to refute his own theory.

If the gentleman had not labored under want of penetration, and had read Anstie's lecture to its end, he would have found that "the distinguished author" has given enough of the etiology to prove that the cause advanced by the gentleman from Albany is not only trifling but improbable, when compared with the conditions which influence the development and course of the neurosis under consideration.

Dr. S., however, has made several statements so manifestly out of the way, and he has placed me in such a false position, that I feel constrained to answer him. He refers to my remarks before the Academy of Medicine.

Now, if he had carefully read the report in the Record, and compared it with what I really did say before that body, he would have seen how greatly at variance were these two statements. In the printed account of the meeting, I am made in one sentence to say that my "attention had been called to hypermetropia, *and other eye symptoms in chorea*," and I had "found them secondary," and in the next sentence I am quoted as having said "strabismus was a common associate of chorea, and *no other* eye troubles had I found in connection with my cases of that disease."

I did say I had found hypermetropia (merely as a coincidence)—I *had* found secondary eye symptoms, among them strabismus. The others were orbicular spasm, disturbance of accommodation, etc.; but as to strabismus, with due respect to the "incomparable," I think every general practitioner has seen it as a

transitory symptom of several brain diseases, a most common example being tubercular meningitis, and in these cases it is the result of muscular spasm, and not connected necessarily with any congenital error of refraction."

I am quite as well aware as Dr. Stevens that hypermetropia, myopia, and astigmatism are congenital defects, and would remind him that this is one of the strongest arguments against his hobby. If this theory is true, chorea would not only be very much more common than it now is, but we might expect to find it at all ages. The authority with which he so confidently assails me says most decidedly that it is "a malady of that period of life which lies between the second dentition and the age of eighteen or thereabouts;" and again, "on the whole we may clinically divide the choreas into two main groups, those of childhood and those of sexual life."

It seems hardly worth while to bring other facts forward to disprove his theory, but I may be pardoned for presenting to the profession several reasons why his position is untenable.

1. A very small number of men, women, and children are absolutely emmetropic. Out of those that are at this critical day considered hypermetropic, the great majority would show one-sixtieth or less of deviation from the normal standard, which is absolutely insufficient as a cause for the production of a general nervous disease.

2. Nearly all cases of chorea are complicated with or follow rheumatic or cardiac disease, sexual derangement, mental trouble, ascarides and many other exciting and predisposing causes, some of which I have already named.

3. Certain varieties are symptomatized by jumping, leaping, or mental aberration, and others are connected with organic disease of the brain, of different kinds.

4. Dr. Loring authorizes me to say that the great majority of hypermetropes go through life without any chorea whatever, and this too while suffering from well-marked symptoms of asthenopia, such as inability to read but for a few minutes, at times tension across the forehead, and headaches. Feeling that the opinion of competent specialists, *pro* or *con*, would more satisfactorily settle this matter, I have appealed to several of our most distinguished ophthalmologists, among them Drs. Loring, Roosa, and others. These gentlemen are of the decided opinion that very few hypermetropes are chronic, and beyond the ordinary nervous symptoms of asthenopia it is difficult to say that the refractive troubles have any importance as a cause.

Dr. Stevens' opodeldoc story, with its delicate and cutting sarcasm, is undeserved. I seriously desired information whether he had had opportunities to observe chorea after he had primarily made the diagnosis of hypermetropia. I felt sure he was able to gratify my desire for additional knowledge of this curious connection.

A medical man whose extensive practice and advantages for observation enable him to report "more than seventy" cases of chorea, seventy cases of epilepsy, one hundred cases of severe recurring headache, and "many other neuroses," not to omit fifty-four cases of "epileptic insane persons," the majority connected with like conditions, should certainly have a great many uncomplicated hypermetropic patients under constant observation, and abundant opportunity to witness the development of some of the "functional neuroses of all kinds," that are "beyond any and all other causes combined dependent upon anomalous refraction of the eyes.

As the matter now stands, Dr. Stevens' theory is antagonistic with the observations of Trousseau, West, Jaccoud, Hughlings Jackson, Broadbent, Russel, Hillier, Radcliffe, Anstie, Kirke, and very many others.

In concluding my correspondence with Dr. Stevens, I wish to make a statement which in time I intend to fully prove, viz., that if errors of refraction play *any* part at all in the causation of functional neuroses, it is certainly a very small one compared to other influences that are well known; and though cases may be brought forward that are myopic or hypermetropic, we must remember the large percentage of the entire community that are the possessors of errors of refraction, and therefore take for granted that some of these individuals must have nervous diseases as well as affections of other systems.

I now trust that reliable and well-known ophthalmologists will note down how often they meet with, and report these nervous cases in their practice.

ALLAN McL. HAMILTON, M.D.

123 EAST THIRTIETH STREET, Oct. 4.

* See Loring's paper, *Trans. Acad. of Med.*, 1873.

MEDICAL CENTENNIAL AFFAIRS.

THE MEDICINAL PRODUCTS OF NORWAY, SWEDEN, ITALY, SOUTH AMERICA, SOUTH AFRICA, CHINA AND JAPAN.

FROM OUR SPECIAL CORRESPONDENT.

PHILADELPHIA, *October* 14, 1876.

ACROSS the central avenue of the main building, directly opposite Norway, Sweden, and Italy, we find exhibits from South America, South Africa, and China and Japan. The medical display is not, as a rule, extensive or inviting, presenting only occasional features of sufficient attraction to arrest our footsteps. From the Argentine Republic are exhibited, in long, horizontal cases, probably forty feet in extent, with about 900 small compartments, the medical herbs, etc., of that region. They are only numbered, not named, and to study their nomenclature and recognize their qualities the visitor must obtain a catalogue from the attendant. Having done so, we find that they have been sent from the provinces of Mendoza, San Luis, Buenos Ayres, etc. The list fills many pages, but our ardor in the pursuit of information concerning them is somewhat dampened by the paragraphic announcement that "the medicinal herbs and plants of this country being as yet unknown to the scientific world, it has not been possible to classify them." The common name is alone given, and some of the medicinal virtues are also detailed. The quillo-quillo, for instance, of a saponaceous nature, is used as a medicine and also for cleaning clothes—a rare combination of good qualities. The girasol is employed for strengthening the eyesight; the cina-cina, for baths instead of mustard; the pago-palo de la Cruz, as an active purgative, fifteen berries being a dose; the camolote for phthisis, the leaf being applied to the lungs; tola, a preservative against the nausea experienced at great elevations from lack of oxygen in the air; agua sanguinaria, for cleansing and purifying the blood, and for dissipating the effects of blows, providing there be no fracture, etc. And so runs the story through hundreds of drugs, some of them with euphonious names, as the coralillo, poratillo, cardo santo, and retamilla; others decidedly more cacophonic, as the matapulgo, hojas de guindo, tulesquiri, etc., most of them mentioned without any therapeutic action associated with them.

There is also a case containing a truss or two, a single artificial arm and a leg, and club-foot irons, exhibited by Lacour, of Buenos Ayres; and Dr. Newberry, an American dentist of the same city, displays some sets of artificial teeth. There is another case in the same department with jars and vials labelled with such medical titles as, Solucion depurativa anti-Sudhan; Balsamico del Misionero, suspiciously like Friar's Balsam in name, Jarabe de Quinia y Fierro, etc. Papel Reactivo contra acidos surely must be test paper; but why send this and the other preparations so far from home? Some volumes of the *Revista Medica Chirurgica* are on exhibition in another case; and in a large pile of miscellaneous pamphlets, devoted mainly to statistics of this region, we notice a little volume entitled "Nociones de Anatomia Fisiologia è Higiene Humana," by Dr. D. Juan Bialet y Masse, which has been accepted as a text-book by the Department of Schools in the Province of Buenos Ayres. The Argentine Republic occupies a large space in the catalogue with items under the head of Medicine and Surgery, but many of them are grouped collectively under one exhibit. Thus we have medicines for animals, for the relief of itch in sheep, cholera medicine, cedron de puna for affections of the lungs, spurge from which castor oil is extracted, etc. The medicinal herbs are sent by a dozen different contributors, and will doubtless find a resting-place, by and by, on the shelves of some college of pharmacy.

From Chili I notice pharmaceutical preparations from Valparaiso, and two large cases of dried leaves, herbs, nuts, etc., some of which are medicinal, by various exhibitors. In one case there is some Café Preparado, said to be a new invention, and if intended as a substitute for the miserable solution or mixture administered to thirsty boarders in some hotels and boarding-houses, under the name of coffee, might be a very desirable article. Some scattered numbers of the *Revista Medica de Chili* momentarily arrest the attention of the medical visitor.

In the rear of this exhibit is that of Peru, the chief attraction of which is the display of mummies. On a shelf are a few bottles of various degrees of pharmaceutical interest, the contents being selected specimens of rhatany, canella, cascarilla, coca, etc. The grains of coca are about the size of small oyster crackers. Strange to say, there is not in the whole exhibit from this country the minutest particle of Peruvian bark. Other parts of the world into which it has been transported for cultivation with good results offer excellent samples, but the country which gives it its popular name, and which has thus had an honor permanently reflected upon it, is barren, so far as its exhibition to Centennial visitors is concerned. Much more prominence might also be given to the jar of dried leaves labelled "coca," for thousands would stop to take a glance at it, if they knew its wondrous virtues, reference to which has already been made more than once in the columns of THE RECORD. It will be remembered that while one writer condemned the use of coca because its victims sometimes lay in the fields all night long, rain or shine, dreaming beautiful dreams, others contend that it gives wonderful buoyancy and strength, relieving fatigue, dissipating weariness, and supplementing partially the use of food.

The republic of the Orange Free State, on the northeast boundary of Cape Colony, sends an interesting collective government exhibit, but the only thing of medical importance is a specimen of the cream of tartar fruit of that locality, a small gourd containing seeds, around which is a powder, similar to the bitartrate of potassium, but whether it possesses the diuretic or cathartic virtues of the latter I am at a loss to say. It is about to undergo analytic examination, I hear.

The Chinese medical exhibit has been pushed into the Mineral Annex, as a late comer which failed of accommodation from want of space in the department allotted to it in the main building. Each case has upon it the name of the port of shipment. It is a curious study of human nature in its semi-civilized aspects, to scan the thirty-five pages devoted to medical subjects in the thick quarto catalogue of Chinese contributions to the Exposition. The medicines are 750 in number, and are chiefly arranged under glass in horizontal cases, and each one in the list is preceded by the Chinese hieroglyphics, the value of each medicine being appended. Some of them are old familiar acquaintances, such as rhubarb and opium, but the quaint and curious uses to which less familiar therapeutic agents are applied somewhat surprise or at least amuse us. We are carried back several centuries to the days when epidemics of old were treated with mixtures of precious stones, goat's brains, urine, etc., when we find in the Chinese medical armamentarium of the present day the heterogeneous compounds and unmeaning substances to be presently referred to. Dried lizards, valued at Canton at eleven cents a pair, are among the first articles of their materia medica that attract our notice. We quote from this interesting Oriental catalogue the following descriptions of other items.

The fruit of the bitter-seeded cardamom is supposed to increase knowledge (as the Chinese characters of its name signify) by strengthening the stomach, with which organ the Chinese connect a person's disposition and mental capacity. The under shell of the land tortoise, which is strengthening and stimulant, is taken in decoction by the old and weak. The lining membrane of a fowl's gizzard, peeled off and dried, is prescribed in dyspepsia, diarrhœa, spermatorrhœa, and urinary disorders; the male bird being used in preparing the drug for female patients, and *vice versa*. Caterpillars are employed as purgatives and antispasmodics. The root of the panax ginseng is considered by the Chinese a very powerful life-prolonging medicine; hence its enormous price, being valued at Amoy at $7,000 a catty! Dried toads are described as tonic and sudorific, but bring only two cents apiece. Moss and ginger are employed together externally in articular rheumatism, a thin slice of the latter being placed over the joint, and the moss, being laid over this, is burnt, producing inflammatory action in the skin. Maggots are prescribed in the delirium of fever and in dysentery. A delectable compound is made by mixing boy's urine (girl's, we presume, would be less efficacious), gypsum, and dew, and stirring with a piece of mulberry wood; the substance deposited being prescribed in phthisis, gonorrhœa, and spermatorrhœa, and being also used as salt with rice. A whole catty of it costs but twenty cents at Amoy. The curious inquirer may find all these and scores of equally odd and fanciful articles on exhibition in the cases by asking the attendant to point them out to him.

In the Japanese exhibit, we notice a microscope and slides from the store of Iwasiya Ichizaemon, "Chemical and Surgical Instruments Export Druggist, No. 18 Honchio Sanchiome, Tokei." Under a framed collection of postage and revenue stamps, which many a juvenile collector would give his last nickel for, are about a dozen painted silk diagrams representing various surgical and other affections, such as necrosis of the carpal bones, sarcoma of the antrum highmori,

lupus, etc.; the artist's name, Sigeaki Yamado, being in the corner of each. Some specimens in the chemical exhibit, which is not an attractive one, are labelled with intelligible names, as tartarus emeticus, but the Japanese hieroglyphics on others were rather more than I could conveniently manage to translate in the limited time I had at my disposal. I noticed here a bivalve speculum, and a few ordinary litters, but they had no special interest or history. It may be stated in this connection that a medical college was founded at Tokio in 1872, that it has five hundred pupils, the course of lectures being in German, and that the instruction is given both in a preparatory school and a college.

Passing next to Portugal, we find a collection and also an individual display of drugs, such as pills of Proto iodureto de Ferro Inalteravel, from Lisbon; Xarope Pectoral Calmante de Lauro-cerejo, etc. A number of manufacturers exhibit Aguas Alcalinogazosas and Agua Mineral. One of them, the Pedras Salgadas Mineral Water Company, states that it received the "prise" at Vienna, and that the waters have been examined and approved by the Society of Medical Sciences of Lisbon. The analysis given of these springs by "the celebrated professor of chemistry in the Polytechnic School of Lisbon, Dr. Joseph Julius Rodriguez," presents a formidable list of alkaline bicarbonates and salts in the waters from four different springs. The combination of therapeutic qualities which they represent may be briefly quoted as follows: "The action of these waters is incontestable for diseases in the organs of digestion; . . . indubitable in curing diseases of the skin; . . . they are already to be found in the rooms of many hair-dressers, who acknowledge their superiority over other means employed against scurf." Serzedello & Co. also display a "Grande Deposito de Drogaria e Productos Chimicos," consisting of acids, ethers, and essences.

In the Turkish department, Herm. A. Holstein, of Constantinople, makes a very beautiful display in a large and handsome case, of different varieties of gum tragacanth, some of it almost white, oil of sandalwood, opium from Asia Minor, scammony, nut-galls, anise, etc. Such a valuable and choice collection should, if possible, be retained in this country.

R. J. D.

KIRKWOOD (S. C.) AS A WINTER RESORT FOR INVALIDS.

To the Editor of The Medical Record.

New York, Sept. 26, 1876.

My Dear Sir:—At this season, when so many are making plans for spending the winter in a milder climate, I have thought that a few words on the subject of a "Southern Home" might be of service. I have never had personal experience of Colorado, Santa Barbara, or other of our Western homes for invalids, and would not therefore be understood as comparing relative merits; but I had opportunities last winter of becoming tolerably familiar with certain portions of the South, and would simply give the results of my observations and experience.

The member of my family for whose benefit I spent the greater portion of last winter away from New York has not absolute pulmonary disease, but is one of that class whose lungs, in common parlance, are "not strong," while I have no lungs that trouble me, but am, *O misericordia*, a victim of acute articular rheumatism. The elements of climate particularly necessary to the welfare of those suffering from pulmonary affections, are:

1. Freedom from moisture.
2. Freedom from sudden and excessive variations of temperature.
3. The presence of a certain terebinthine element in the air.

In addition to these qualities of climate, it is important that the patient have pleasant surroundings, and a diet abundant in quantity and variety, and, what is not always found at the South, well-cooked.

Camden, S. C.—or rather Kirkwood, about a mile from the town—is situated on some piny sand-hills, at an elevation of about 240 feet above tide-water. Owing to the peculiar nature of the soil all moisture is almost immediately absorbed, so that the air is remarkably dry. As regards temperature, while, as throughout the entire South, there are a few cold days, we find none of that extremely penetrating cold experienced in places nearer the seaboard, nor, on the other hand, do we have any of that excessively enervating heat met with in places farther south.

The pine trees and turpentine stills in the vicinity give the air a terebinthine odor, most soothing to those harassed by cough.

From a table of observations made during the early part of the present century by one of the most respected citizens, I have copied a few statistics, which, I think, give a fair idea of the present average temperature.

1810.

January.		February.	
7 A.M.	40.70°	7 A.M.	40.77°
12 M.	51.60°	12 M.	58.07°

March.

7 A.M.	45.38°
12 M.	60.75°

1815.

January.		February.	
7 A.M.	36.26°	7 A.M.	38.28°
9 P.M.	42.70°	9 P.M.	45.53°

Whether from the absence of furnace heat—our rooms were warmed by large, open wood-fires—or to the dryness of the air, my two children, neither of whom had ever before passed a winter free from croup, showed not a symptom of it, though exposed in all weathers, in fact almost "living out of doors," in rainy as well as pleasant weather.

One word in relation to the people there. During the war they suffered terribly, both in the loss of property and kindred, and now almost all are much reduced; yet I have never met with a more refined or cultivated society, nor have I ever been where I was more cordially received, or where more sincere sympathy was extended in times of sickness and anxiety.

Very truly yours,

Willard Parker, Jr.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department United States Army, from October 8th to October 14, 1876.

Randolph, J. F., Surgeon. Granted leave of absence for four months. S. O. 208, A. G. O., Oct. 6, '76.

McKee, J. C., Surgeon. Granted leave of absence for one month and twenty days, with permission to go beyond limits of this Division. S. O. 138, Div. of the Pacific, and Dept. of California, October 2, '76.

Hartsuff, A., Surgeon. Leave of absence extended one month. S. O. 110, Div. of the Missouri, Oct. 6, '76.

Reed, W., Asst. Surgeon. Granted leave of absence for one month, with permission to apply for an exten-

sion of fifteen days. S. O. 119, Dept. of Arizona, Sept, 27, '76.

Koerper, E. A., Asst. Surgeon. Assigned to duty at Camp Sheridan, Nebr. S. O. 137, Dept. of the Platte, Oct. 6, '76.

Wilson, Wm. J., Asst. Surgeon. Leave of absence extended four months on Surgeon's certificate of disability. S. O. 211, A. G. O., Oct. 10, '76.

Wood, M. W., Asst. Surgeon. Assigned to duty at Camp Robinson, Nebr. S. O. 137, C. S., Dept. of the Platte.

Appel, D. M., Asst. Surgeon. Assigned to duty at Fort Stanton, N. Mex. S. O. 206, Dept. of the Missouri, Oct. 4, '76.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending October 14. 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Oct. 7	0	16	21	2	8	57	0
Oct. 14.....	1	14	30	4	32	38	1

Practising without a License.—In Judge Gildersleeve's court, John Lang, of 1012 King street, has been tried and convicted for practising medicine without a diploma or license from the County Medical Society. The defendant was arraigned under a statute passed May 11, 1874, declaring it to be a misdemeanor to practise medicine or surgery without license or diploma from some chartered school, State board of medical examiners, or medical society, etc. He was found guilty, and, through the leniency of the court, fined only $50. The defendant is a native of Germany, and sixty-four years of age.

Dr. Orsamus Smith died of acute phthisis, September 19th, at the age of forty years. He graduated at Bellevue Hospital Medical College, class of 1862, after which he entered the U. S. Army medical service, and was Assistant-Surgeon of the 10th Regiment, N. Y. Volunteers, until the regiment was mustered out, May, 1863; Surgeon of the 84th Regiment, N. Y. Volunteers, in 1864, and of the 5th Regi- N. Y. Volunteers, until the close of the war. Having a decided taste for military medicine, and gifted with more than ordinary executive ability, the U. S. Marine Hospital Service opened to him a field of usefulness, and invited the exercise of his best talents. He soon attached himself to this arm of the service, and at once became identified with every movement calculated to advance its interest and extend its usefulness. At the time of his death he was Surgeon in Charge of the U. S. Marine Hospital, at Mobile, Ala., a position which he filled with great satisfaction. Added to the quality of a thoroughly educated physician, he had that of a gentle and sympathizing nature, which made for him warm friends wherever his social or professional duties called him.

Prof. Axenfeld.—The death of Prof. Axenfeld is another very serious loss to the faculty of Paris. He was the successor of Andral in the Chair of Internal Pathology, and, though young, had already achieved a brilliant reputation as an instructor and writer. He is best known by his *Traité des Névroses*, which passed through numerous editions. For the past four years he had been confined to his bed by a painful and incurable malady.

The late Doctor F. C. Rau, of West Hoboken, N. J.—At the regular meeting of the District Medical Society for the county of Hudson, N. J., held on August 2d, his death was announced, and, through a committee appointed for the purpose, the following action was taken:

Whereas, It has pleased the Almighty God to remove from our midst our late fellow-member, Doctor Frederick C. Rau; therefore

Resolved, That in the death of Doctor Rau our profession has been deprived of an earnest and conscienscious member, and the public has lost the services of an able and faithful physician.

Resolved, That we tender to his family and friends our hearty sympathy.

Resolved, That a copy of these resolutions be sent to the Medical Record and to the Standing Committee of the Medical Society of New Jersey.

Committee { J. R. Waldmeyer, W. R. Fisher.

[We regret to say that the appearance of the above item has been delayed until this time, in consequence of pressure upon our columns.—G. F. S.]

The late Dr. D. Brainard Hunt.—At a special meeting of the Medical Staff of the Out-Door Department of Mount Sinai Hospital, held Oct. 2d, 1876, the following resolutions relating to the death of Dr. D. Brainard Hunt, late a member of the Staff, were unanimously adopted:

Whereas, Our late esteemed and lamented colleague, Dr. D. Brainard Hunt, has been unexpectedly removed from our midst; therefore be it

Resolved, That individually and as a body we express our deep grief at his sudden decease.

Resolved, That we look upon the death of our late friend, whose uniformly courteous, genial, and obliging demeanor caused him to be beloved by all who came in contact with him, and whose scientific attainments promised a bright future for their possessor, a loss to us personally and to society and the profession at large.

Resolved, That this Staff send to the bereaved relatives of Dr. Hunt their heartfelt sympathy in their affliction.

Resolved, That a copy of these resolutions be sent to the medical journals of this city for publication.

(Signed) Paul F. Mundé, M.D., *President.*
E. J. Messemer, M.D., *Secretary.*

At a meeting of the Medical Staff of the Northwestern Dispensary, held on Oct. 6th, the death of Dr. Hunt, late attending physician to the class for diseases of women, being announced, it was resolved that we, his associates, hereby express the deep sorrow occasioned by his loss. As a physician of unusual culture and attainments, and the possessor of all the qualities which mark the Christian gentleman, we shall ever cherish his memory.

To his family we tender the assurance of our sincerest sympathy in their bereavement.

In behalf of the Medical Staff,

R. J. McGay,
Geo. Henry Fox,
W. H. Katzenbach.

Original Lectures.

THE ANTISEPTIC METHOD OF DRESSING OPEN WOUNDS.

A CLINICAL LECTURE

By PROF. JOSEPH LISTER,

OF EDINBURGH.

Delivered at Charity Hospital, New York, October 10, 1876.

(Phonographically reported for THE MEDICAL RECORD, by Nelson W. Cady.)

GENTLEMEN:—It is a most unexpected privilege that I enjoy, of addressing a few words to you. Until just now, when I saw you all galloping with such speed from the steamer, I had no idea that I was to address so large a body of students.

You will, therefore, excuse me if the remarks which I may make should be extremely imperfect. If, however, as I understand my friend, Prof. Van Buren, you are already through him indoctrinated in the principles of antiseptic surgery, it is not, therefore, necessary for me to go much into details.

Well, then, as the patient is not quite ready, I will say a few words of introduction. The main principle of antiseptic surgery is to be illustrated in this case by opening a venereal abscess in the groin.

If we have a fracture, the skin being unbroken, everybody knows that such an injury is devoid of danger. We put on proper splints, keep the parts dressed, and there is no inflammation in the parts to speak of,—no constitutional disturbance and no trouble. But if it so happens that the skin is broken at the same time that the bone is broken, then we have an injury that used to be one of the most formidable in surgery. If we compare the two injuries, we see that the circumstance of this skin being broken is not, *per se*, of any material consequence at all; it may be that the simple fracture is much the more severe injury of the two. The bone may be comminuted, the vessels extensively lacerated, and a large amount of blood diffused. Whereas, in a compound fracture, we may have the bone simply snapped across, but the skin broken.

Now we know from other circumstances that the lesion in the skin does not in itself particularly constitute the injury; it is not the injury to the skin, *per se*, but the fact of the skin being broken. We all know that if a compound fracture is treated or not treated, in the course of three or four days we have an offensive discharge from the opening. I do not mean that a compound fracture not treated antiseptically will have such a result. It was known in the time of John Hunter that such a fracture, if covered over with cotton and air-tight dressings, and left alone, will go on as quietly as if the skin were unbroken. But suppose the skin is treated with poultices, you are sure to have a suppuration in two or three days. The blood within, the extravasated blood, putrefies. If any one were to talk of pouring a quantity of putrid blood into a recent wound, such a proposition would be received with horror; but everybody knows that pretty much the same thing takes place if the blood is allowed to putrefy in a wound. After a few days have elapsed, the wound becomes granulated, and as soon as granulation takes place, if the surfaces are brought together, there is apt to occur union by first intention.

It was shown by Pasteur, conclusively shown, it seemed to me, after reading his experiments, that putrefaction was a fermentation, that it was a manifestation of the existence of a ferment similar to that which exists in yeast.

When that was shown by Pasteur, then at once it occurred to me, here is a chance for improvement. We may possibly be able to prevent putrefaction in wounds if the cause of putrefaction in wounds is not the access of air, but of living organisms developed in the air, and which in the blood are the cause of putrefaction; then it may be that we may get hold of some agent which will be strong enough in its action upon this kind of organisms to destroy them without doing damage to the human tissues, just-in the same way as crab-lice are destroyed without injury to the skin. So in this case, if we can apply to our wounds some agent which may destroy the minute organisms, which are the cause of putrefaction, without injuring the wound, the problem is solved—it is no longer a question of hermetically sealing out the air; it is merely applying a dressing that shall act as a germ-destroyer to prevent the influence of these living organisms.

This, gentlemen, is our principle. The agent which we found in the majority of cases most efficient is carbolic acid. It had been used without my knowing it, in a medical ward in the hospital, and with great advantage, as an antiseptic. It had been used, as well as antiseptics of various kinds, for the purpose of *mitigating* putrefaction, not of *preventing* it; that is the great difference.

The principle of antiseptic treatment is to prevent the occurrence of putrefaction in the wound by the presence of the organism with which you have to deal. If you can prevent that, then your wound comes to be in the condition of a simple fracture.

Taking this example of a simple fracture, we feel as a matter of course that if we really can by any means adopt such a mode of dressing as shall be equally efficient with the unbroken skin, a wound, no matter how severe or contused it may be, and no matter what the patient's constitution, ought to be perfectly amenable to treatment.

You may ask, Why do you disregard the patient's constitution? My reply is, Do you regard the constitutional treatment important in a simple fracture in which we have a severe wound, contused, lacerated, and so on? If you could see such a case, you would say, Here is a wound that will not heal without sloughs and suppuration. Yet because we cannot see the injury, and because the skin is unbroken, we are apt to forget what is really the nature of the injury in a simple fracture, which I venture to say is as bad and much more severe than any that the surgeon ever inflicts. Yet no man regards the patient's condition in a simple case of fracture, but contents himself with the local treatment. If constitutional treatment is adopted at all, it is only in case of constitutional disturbance. . . . .

The treatment of an ordinary abscess, acute or chronic, under antiseptic management is, I think, one of the most beautiful points of the whole matter.

Suppose an abscess is opened in the ordinary way, that is, by a free incision. The result is, you get rid of your patient by opening his abscess; the previously maintained suppuration is gotten rid of by relieving the tension; but instead of the previously existing causes of irritation, you let in a new one, viz., the *putrefactive element*. The discharge remaining in the abscess putre-

fies, and, by reason of its irritating properties, ends in and keeps up the suppuration. But by this means [the antiseptic method] you prevent putrefaction, prevent the access of putrefactive elements, while at the same time you get rid of the tension by opening the abscess and introducing a drainage tube, while the so-called *pyogenic membrane* is left free of any disturbing cause at all, and as soon as the pyogenic membrane is free from disturbance it ceases to be pyogenic.

If you take the two flaps of a patient's thigh, where an operation has been performed by the double flap method, and lay the granulating surfaces together—taking away the dressings which our forefathers used to have between the flaps after an amputation, to make them lie apart—when you come to see the case next day, you will probably find a large extent of these granulating surfaces coalesced near to each other. Well, now, consider these surfaces one moment.

The granulating surfaces have no tendency to form pus unless they are irritated. Suppose that the granulating surfaces have a tendency to form pus, then if the two granulating surfaces are brought together we should have pus secreted. *Impossible.*

The secretion would still go on, although the surfaces were thus united and in contact with each other. There is nothing to prevent the possibility of the effusion of fluid, if it were the office of granulating surfaces to produce pus. The pressure would lead to tension and the formation of more pus. But even then there is no more serous effusion, that is to say, the serous effusion soon ceases after the granulations are brought together; for if the serous effusion still continued, the granulations could not coalesce. What is the fact? That leads to this remarkable result, that from that time forth the formation of pus ceases. It is simply disturbance that keeps it up, and nothing else; but when the granulations are put in contact with each other, they will protect each other perfectly from any irritating cause. The granulations of the previously suppurating wound thus protected, immediately cease to suppurate; very soon after they cease to form serous effusion, the tissues proceed to develop into the higher fibrous tissue of the cicatrix. There, gentlemen, you have evidence that the only thing granulations require is to be *left alone*, free from any serious disturbance, and the result will be that you will have no more pus. Open the abscess antiseptically; employ efficient antiseptic dressing, and at the same time provide for the escape of serous effusion, and the suppuration ceases from that time forward.

THE OPERATION.

The apparatus by which the carbolic spray is generated has been already described, so that it is not worth while to go into details. The few general principles which Prof. Lister laid down were of much importance, viz., that it was necessary, to the proper application of the antiseptic method, that the spray should be thrown out in large volume, extensive enough to envelop completely the hands of the operator, the instruments, and the site of the operation; and if at any time he was compelled to move his hand out of the spray, to take up a new instrument, he should dip his hands in the basin of carbolized water (aq. 20, acid carbol. 1) before using it, otherwise that neglect might be the means of introducing these minute organisms into the wound; that the skin over the point of operation should be very carefully shaved, so as to leave no parts unexposed to the action of the carbolized water which was to be applied to the integument for the destruction of any of these organisms which might exist upon it; that any neglect of the total destruction of all the organisms would be fatal to a properly considered antiseptic method of treatment.

The abscess in the patient's groin being opened in the usual manner at the most dependent point by a free incision, the Professor remarked that, as it was necessary to establish a drain, he was in the habit of using the india-rubber drainage tube of Chassaignac; that an important point in the application of this tube is that it should not be left projecting outside the wound, but should be flush with the surface; and that to keep the tube from being pushed into the wound, two small threads were fastened on either side of it; and that, as in the present instance, the tube was placed in an oblique position, it was necessary to cut the end of the tube in an oblique manner, so as to be made flush with the surface.

The abscess, when opened, discharged a large amount of grumous, offensive pus, which was carefully sponged away with carbolized water. Happening to pick up a sponge that had been dipped into the basin containing the chocolate-colored mixture of pus and carbolized water, he used it also, and remarked—in answer to some one who objected, that the sponge was foul with pus—that this was perfectly true, but that the sponge was *antiseptically clean*, and was, moreover, vastly cleaner for surgical purposes than the majority of sponges obtainable in the shops, because it had been dipped in the antiseptic fluid. Having emptied the abscess and put in the drainage tube, he applied the antiseptic dressing, which consisted, first, of several layers of carbolized gauze, to act as a compress; then of a larger layer, about sixteen inches square; next a piece of oiled silk, and finally of several more layers of gauze, the whole being confined to the limb with elastic bands, so as to keep out the air.

One of the windows of the amphitheatre happened to be open, and a current of air deflected the cloud of spray from the wound. Professor Lister at once called attention to this as an important point to be observed. The window must be shut, otherwise the spray would be diverted from the wound, allowing the access of the organisms against which the spray was intended to provide.

His minute attention to all such details made this lecture of unusual interest and importance.

Original Communications.

UPON CERTAIN NEUROSES FOLLOWING THE ZYMOTIC FEVERS.

By ALLAN McLANE HAMILTON, M.D.,

VISITING PHYSICIAN TO THE EPILEPTIC AND PARALYTIC HOSPITAL, NEW YORK, ETC.

CERTAIN eruptive fevers, particularly those of a serious nature, create in the nervous system a vast amount of mischief, and leave after-effects formidable in the extreme; because they defy treatment, and involve a structural change which is generally permanent.

In most of these acute disorders, when death occurs, the nervous system is the final *point d'attaque*, and coma, convulsions, and other terminations, constitute the last stages of the disease.

If these morbid conditions do not carry off the patient, he survives them to suffer some one of the neuroses it is my purpose to discuss. The exanthemata

which I shall allude to are variola and cerebro-spinal meningitis, although rarely scarlatina may leave behind it a great variety of nervous troubles—not only those dependent upon uræmic poisoning, but even degenerative diseases such as sclerosis or other structural alterations.

Various forms of local paralysis, occasionally hemiplegia, muscular contractions of a permanent nature, alterations in sensation, and affections of the organs of special sense, are morbid conditions that may sometimes follow either of the diseases I have mentioned. Convulsions, though more rare, are occasionally met with.

In one class of cases, those that have begun with varioloid, paralysis is sometimes left. The paralysis is generally due to changes in the anterior columns of the cord, and resembles very closely the other forms characterized by rapid wasting of special muscles or groups of muscles, as in essential spinal paralysis, and progressive muscular atrophy. Sensation is generally unimpaired, and there is decided bladder trouble and certain evidences (such as bed-sores) of a perverted state of the cutaneous nerves. In certain respects the paralysis, if it be paraplegic, resembles in many points the form due to myelitis.

As sequelæ of scarlet fever, we may have serious changes in the brain and cord, and permanent contractions. Tremors, or even many psychoses of an undefined character, may be sometimes met with.

Among the great number of cases that have survived cerebro-spinal meningitis, a certain number carry through life most terrible traces of the disease. Usually the pathological state is one of chronic meningitis located at the base of the brain and upper part of the cord. Gallup, one of the first medical men who wrote upon the subject, recognized these cases, and considered that the anterior and inferior parts of the brain were the localities which were the seat of the most violent inflammation. The involvement of certain nerve trunks, and the subsequent loss of function, particularly in the seventh and fifth nerves, enable us to satisfactorily define its site. Deafness as well as impairment of sight are striking and not uncommon results. Not unrarely the condition is connected with permanent contraction, or spasm of the post-cervical muscles, or by a decided pain running down the back and arms. A symptom I have often noticed with cerebral tumor is the dizziness which troubles the individual when he looks upwards. I have heard these patients complain of this trouble.

The appearance of facial neuralgia or sciatica (and these are not the peripheral varieties of the disease) is not uncommon in the adult who recovers from small-pox. A patient now under treatment, after a severe attack of variola which has left him deeply pitted, developed a most troublesome neuralgia of the fifth nerve two months after, and his condition after the subsidence of the fever, together with the absence of all other causes, pretty clearly proved the neuralgia to have been caused by the variola. Sciatica on the same side (the right), and a "heavy feeling" of the right side of the body, are other symptoms which rather point to some affection of one-half of the nervous system. He has continued three years in this state, and when I first saw him, two months ago, complained of the symptoms I have before alluded to. His right side was cold and slightly anæsthetic, and the muscles of the right leg somewhat atrophied. Excision of the supra-orbital branch of the fifth nerve, and all sorts of medical treatment, failed to relieve him. I am firmly convinced that his trouble originated in the cerebro-spinal axis.

Vulpian has related cases of neuroses following small-pox; and Janeway presented to the New York Society of Neurology, quite recently, a case of partial paralysis following close upon the heels of a severe attack of variola. The patient was a young man of about twenty who presented a paralysis of the extensors of the right arm and forearm. The biceps was entirely paralyzed, and there was no reaction to the faradic current, but contraction followed the galvanic.

The paralysis is confined entirely to the right side, the left hand being only slightly numb. Dr. Janeway was inclined to believe this condition to be the result of neuritis.

Other cases have been reported where the nervous symptoms were all provoked by a central disorganization of the nervous tissues. In certain cases decided changes, consisting of sclerosis or softening, were apparent after death. Westphall, Lockhart Clarke, besides Vulpian, have reported these cases. As I have said, they present certain homologous features.

Westphall's case was one of partial paralysis, which began in the feet and afterwards increased so that finally there was complete paralysis of the lower extremities. The patient was just able to move his great toe. Reflex movements were not provoked by any of the ordinary means. Paralysis of the bladder was present. Sensation was unimpaired.

His other case resembled this one in many points. Immediately after recovery the left leg was gradually paralyzed, and subsequently the right was affected. This patient had incontinence of urine and fæces. Suffered greatly with cystitis, and ultimately died. Both of these patients had bed-sores.

In Vulpian's case there was partial paralysis just as there was in Janeway's. This patient lived. He accounts for the affection of special muscles and the short duration by supposing the pathological condition to have been a temporary irritation at the roots of certain spinal nerves supplying the affected muscles. He considers the irritation to have resulted in the destruction of the cells in the anterior cornua, and atrophy or loss of function of the fibres of the anterior nerve roots as a consequence of the degeneration of the nerve cells with which they were connected.

Lockhart Clarke's case was caused by inoculation of small-pox virus. The patient was thirty-two years of age, and had been inoculated when he was one year old. Coincident with the eruption, the left arm lost its power and the right arm next followed suit. The muscles of arms, shoulder, and trunk atrophied and almost disappeared, and the heart's action was greatly changed, as it became irregular.

A few months before death he was carefully examined, and it was found that the muscles of arms and shoulders were scarcely developed. The muscles of the forearm had escaped the general wasting. The muscles of the ball of each thumb were very much wasted, while those of the fingers were unaffected. The lower extremities were perfectly normal.

Drs. Webber, Putnam, and Goss reported during the year 1873 several cases of paralysis occurring with variolous eruptions. Dr. Goss's case was one of varioloid. During convalescence there were deep pains (referred by the patient to the bones), which lasted for two days. They began in the left arm, and next day extended to the right arm, and both lower extremities were finally affected. The patient was unable to flex legs or thighs, and could not raise her head to her head. There was no paralysis of any of the muscles of the head, and her intellect remained clear. There was no abnormality of sensation except the

pain alluded to, which disappeared with the commencement of the paralysis. The patient died the next day.

Dr. J. J. Putnam's case was one of severe variola. The patient, a man, remained unconscious till the eighth day, and then complained of a weariness or heaviness of the right shoulder, which subsequently became the seat of pain. This symptom gradually disappeared, and Putnam was enabled to diagnose a paralysis of the posterior thoracic nerve. The lower half of the trapezius and the rhomboid muscles did not respond to electrical stimulus. Under strychnia the patient improved.

Besides the cases I have mentioned, Eulenburg and Pforzheim have collected a number; some of them presenting the symptoms of disseminated sclerosis. The others were paraplegiæ, and partial paralyses of different kinds. The latter recovered generally in a short time.

Even hemiplegia may be a result of variola; and the following case, in which epilepsy and hemiplegia dated from the small-pox, is perhaps a good one to illustrate the subject. The paralysis was due most probably to an epileptic seizure in which some vessel was ruptured.

M. J. T., 35 years, born in New York; no occupation; entered the Epileptic and Paralytic Hospital Feb. 11, 1870. Mother died of consumption; sister had epilepsy. First fits appeared at the age of five years; came on about three months after an attack of small-pox; hemiplegia of the right side came on same time, she believes, as the epilepsy. Before the fits she has cramps in the paralyzed arm and hand, and a feeling of dizziness; has it most frequently in the daytime, three or four at a time, once in three or four weeks. But shortly before her admission had them nearly every day. Circumference of skull, 20¾ inches; antero-posterior measurement, 13 inches; transverse, 13 inches; memory good, mind rather weak; speech good, sight good, hearing fair with left ear; cannot hear with right ear, even when the watch is pressed against it. Sensibility, pinching, and pricking appear entirely abolished on the right side from head to foot. Drags right leg in walking; has but little use of right arm and hand, the muscles of which have a tendency to spasmodic contraction; temperature somewhat diminished on right side; pulse, 96. Respiration apparently healthy, appetite fair, bowels rather costive. Menstruated at 13 years, and has been regular since.

Present condition, June 1, 1876:

Memory appears to be very good; the fits have decreased in severity and in number. Has but two attacks last month; none at night. Has hæmoptysis; has an aura of about a minute's duration; flexor of muscles of right hand are contracted; thumb is turned again, so that its inner part touches the under part of the index finger; lastly, the whole hand is somewhat drawn up, and lies in her lap with the palmar surface up. When directed to put hand up to shoulder it shakes right and left; this shaking is very violent, but only so when she moves it. It is, however, entirely quiet while in her lap. Has the irregular hemiplegia gait; protrudes her tongue straight; eyesight good, hears perfectly well. There is special paralysis on the side opposite the hemiplegia.

Cerebro-spinal meningitis leaves sequelæ much more interesting and obscure. Those cases that recover sometimes only escape with extensive changes in the meninges, and a form of low inflammation, confined usually to the upper part of the cerebro-spinal system. As I have said, the organs of special sense are affected in many cases, and the diagnosis from chronic basilar meningitis, which is progressive, can be made by bearing in mind the fact that the latter disease is progressive, and that affections of the organs of sense are from before backwards, while in the form of meningitis first alluded to the onset is sudden, dating from the attack, the anterior nerves being more often exempt. It differs from the ordinary meningitis in the fact that the symptoms of acute or subacute disease are expressed by very intense and rapidly fatal phenomena. This condition can be compared to the condition of the pleura after a severe pleurisy, in which disease adhesions, thickness, and other changes remain for years, rendering the patient liable to acute attacks at subsequent periods, and interfering with respiration. The patients I have seen have many symptoms alike, which are, I think, characteristic—a rigidity of the muscles of the upper part of the body—the head being held by the patient just as it sometimes is in what we familiarly call a "stiff neck." It sometimes necessitates a painful effort to turn it, for when such an action is performed a dart of pain runs down the shoulders and arms. A symptom, which I think is something more than hysterical, is the feeling experienced by the patient, who says there is a "cracking" when he turns his head. There is generally dull pain, sometimes localized, but more often diffused; much dizziness, occasional vomiting and mental uneasiness. It is rare for the disease to locate itself in the middle or lower part of the spine, for here the meninges are separated from the cord, and there is sufficient room for thickening without mechanical pressure; but occasionally the prolongations of the dura mater, which form sheaths for the spinal nerves, are the seat of such inflammatory action, and, as a consequence, darting pains, rigidity, and other symptoms are expressed.

Partial paralysis of one leg or arm is not an uncommon result, and even hemiplegia may follow. In one case that I remember, there was an attack of hemiplegia with total deafness. The child was unable to articulate, and remained in this condition for several years, not improving in the least. In another case—a girl aged 15—there was a rigid contraction of the flexors of the arm and forearm, and a contraction of the muscles of the back of the neck, which drew down the occiput to an uncomfortable degree.

In the spring of 1874 I saw the wife of a physician of northern New York, who had passed through a severe attack of cerebro-spinal meningitis two years before. After a slow recovery certain symptoms remained, which increased in severity up to the time of her visit. She was a delicate and slender woman, very nervous and hysterical, and easily worried. She manifested a train of symptoms very much like those I have already detailed—a feeling of constriction about the throat, a spastic, contracted condition of the post-cervical muscles, etc. When looking upwards she complained of dizziness, and constant dull headache; there were also pains over the spinous processes of the upper dorsal, and over all the cervical vertebræ. At times she heard noises and roaring, and suffered from otalgia. Convulsive jerkings of the head, and clonic spasms of the arms were occasional. Her pupils were normal, but the conjunctivæ were injected. Ophthalmoscopic examination gave negative results. "Crawling" sensations and coldness of hands were not uncommon.

Another case seen with Dr. Rankin, of New York, was of a most interesting and grave character. The child, previous to its acute illness—cerebro-spinal meningitis—was bright and attractive. After the disease had spent its force, she came out of it entirely changed.

Her mental condition was one of imbecility, and there were permanent contractions of the muscles of the upper and lower extremities. Deafness, with destruction of the tympani, and other life long infirmities, were left. Dr. Joseph Jones relates the case of a patient who had had cerebro-spinal meningitis in infancy, and recovered with complete paralysis of arms and legs, which were atrophied, "rigidity of spine," arrest of mental development, paralysis of tongue, etc., and he remained in a helpless condition for twenty years. The head and trunk were those of a man, but the lower extremities were withered and useless.

Gallup and other investigators dwell at some length upon the aural complications. The former repeatedly alludes to the intense energy of the inflammatory processes of that attack, not only the meninges in the locality, but also the tympani and the membranes which line the different cavities of the ear.

Dr. Samuel J. Jones, of Chicago, has reported several cases of auditory disease left in the wake of cerebro-spinal meningitis, and some of them present the grouping of symptoms I have here alluded to. In Case V. there was loss of speech, unsteadiness of gait, and other difficulties. The power of speech was subsequently regained. Case VI. was deaf and dumb. This case "curved his spine backwards," and his head was drawn in the same direction.

Occasionally a hyperæmic condition or actual meningitis will remain after typhoid fever. I have met with only one case of this kind. He was a patient of Dr. Wm. Shine, with whom I saw him. Two years ago he recovered from an attack of typhoid, and with convalescence he gradually lost power in the right hand, right leg, left leg and left hand in the order I have named them (this is his statement). Preceding these conditions there were shooting pains running down the spine and around the body. He was paraplegic two months afterwards. During this time reflex movements were easily provoked. "When my feet came in contact with the foot of the bed, if the cold wood touched them they would fly up." He evidently had the contractions which are so clearly symtomatic of meningitis. There was some constipation; no bladder trouble except atony. His neck "felt stiff;" there were also the pains I have before alluded to, and he was occasionally dizzy. The loss of power in legs has gradually returned.

Present Condition.—The patient walks fairly, with no apparent impediments. The skin is slightly hyperæsthetic; no atrophy of any muscles; has good muscular strength; there is slight tenderness produced by pressure over the vertebræ between the scapulæ; muscular contractions at back of neck, and some pain with movement; slight distention of abdomen by flatus (he says this is a constant symptom); bladder and bowels in excellent condition; some very trivial effort required to urinate; no headache, but dizziness caused by looking upwards; no loss of power in hands or arms; no constricting bands; patient can stand with eyes closed. Co-ordination of delicate muscular acts unimpaired; there are no twitchings at night left. I suggested the propriety of giving iodide of potassium in addition to the ergot Dr. Shine had prescribed. I also recommended the actual cautery.

In regard to the results of post-mortem examination I cannot do better than by referring to Fox. He details the autopsies of the cases of varioloid of Westphall and Clarke. Gross examination of the cords of Westphall's two cases revealed congestion of the gray matter, but the white matter and nerve roots appeared perfectly healthy to the naked eye; beneath the microscope, however, specimens hardened in bichromate of potash solution showed areas of softening in gray matter; certain parts were changed in color, and these altered portions were found to contain an abundance of fat granules. In Clarke's case the anterior cornua were the seat of decided changes, and in one locality a dilated vessel surrounded by a layer of exudation was found. The nerve cells in the anterior cornua were much reduced in size, and at some points had a granular appearance.

The appearance of the interior of the cranial cavity in the other disease hardly needs a description. The brains of individuals who have died of chronic insanity, furnish us with illustrations of what we may expect to find in chronic cerebro-spinal meningitis. Thickened, and pearl-colored meninges, blood-vessels with thickened walls, points of adhesion, and occasionally a compressed cortex cerebri, are natural results of the disease to be found at the base of brain; I have seen exudations and false membrane, atrophied nerve trunks, and adherent membranes.

It is almost unnecessary to add that the prognosis of these two varieties of disease is exceedingly bad. In one the structural alteration of the nervous substance is complete in most instances. In the other there is a disposition of the investing membranes of the brain, when once the seat of inflammatory action, to remain thickened. The vessels undergo obliteration, and the nervous tissue beneath is deprived of nourishment. In those parts of the cerebro-spinal axis where there is not room for increase in size, pressure upon the cortex must be the cause not only of inflammatory changes, but even of atrophy. Inflammation of the dura mater is rarely stationary; the more delicate membranes investing the brain invariably suffer, and as a consequence the small vessels which go therefrom through the cortex become occluded, and as certain parts are deprived of nourishment, minute foyér of softening must result.

As to treatment, very little can be done. I have great faith in iodide of potassium and belladonna. The actual cautery, not used superficially, but for the production of ulcers on the back of the neck and between the shoulders, sometimes relieves the patient, but at best the improvement will be of short duration in the majority of cases.

The following authorities may be consulted:

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123 East 30th Street

The New Hôtel Dieu.—Work on this new hospital is being pushed with great activity. The walls of the old Hôtel Dieu will be pulled down before the opening of the Exposition in 1878. The fountains for the hospital court are now in course of construction.

Progress of Medical Science.

On Filaria Sanguinis Hominis Ægyptiaca.—Dr. Sousino, of Egypt, has for some years had an Egyptian Jew, aged about fifteen, under observation for hematuria depending on bilharzia, and cachexia due to that and the presence of intestinal worms—ascaris lumbricoides and oxyuris. While examining the blood to ascertain whether the bilharzia was of not more general distribution through the systemic circulation than had been supposed, he discovered a new parasite, a nematoid hematozoön, a filaria. This worm closely resembled that recently discovered by Dr. Lewis, of Calcutta, in the blood of persons suffering from chyluria, lymph scrotum, or elephantiasis Arabum. Dr. Sousino considers that the filaria he has discovered resembles rather the filaria observed by Dr. Lewis in dogs, than that in man. It wants the external envelope, for instance, and he proposes to name it as a distinct species—Filaria sanguinis hominum Ægyptiaca. The young Egyptian in question presented no symptoms specially suggestive of the existence of a hematozoön; there was neither chyluria, elephantiasis, nor lymphatic varix, all of which are found in Egypt. This discovery gives support to the suggestion that other forms of disease, in hot and tropical climates, hitherto unsuspected of such origin, may ultimately prove to be due to the presence in the blood and tissues of low forms of living organisms.

Dr. Sousino has also recently discovered a new form of bilharzia in the portal vein of a young bull. He proposes to call it "bilharzia bovis," and thinks the discovery may be of importance, by opening the way to the discovery of such prophylactic measures as may avert the disease from man.—*The Lancet*, Aug. 26th.

Case of Tetanus treated with Calabar Bean.—H. W., aged forty-seven, a gardener, received a wound in the web between the thumb and index finger, from a branch of a laurel bush that had been cut off obliquely. The wound was about half an inch deep. It was carefully cleansed and kept open for a fortnight. Sixteen days after the injury, symptoms of tetanus set in, and five days later, on June 16, 1875, he was admitted into St. George's Hospital, under the care of Dr. Dickinson and Mr. Pollock. At that time the symptoms of tetanus were well marked. He was in a condition of opisthotonos, and spasmodic contractions of the muscles of the neck and face, lasting about five seconds, occurred ten or twelve times a day. He was at first put on twelve grains each of chloral hydrate and bromide of potassium, with temporary improvement. On June 19th, however, he was much worse, the spasms recurring five or six times a minute. One-eighth of a grain of extract of Calabar bean was injected subcutaneously every hour, from 11.15 P.M. until 7.15 A.M., on the 20th. After this the spasms occurred at intervals of about two minutes, and were less severe. He felt easier and slept some. On the 22d the injections were given every hour and a half, alternately with a pill containing one-sixth of a grain of the extract. After 10 P.M. the pills and injections were repeated every two hours. On the 24th, the improvement still continuing, the injection was increased to one-fourth of a grain. On the 25th the treatment was discontinued for five hours, but as the spasms become more frequent, it was resumed as before. On the 26th the spasms did not occur, except when the fauces were tickled, and the injection was given only every four hours. On July 1st, the injection was ordered every third hour during the day, and a pill every third hour during the night. On July 3d, there was a slight return of spasms. Two-thirds of a grain of the extract were given subcutaneously every three hours during the day and as a pill at night. On the 4th, one grain of the extract as a pill was ordered every three hours during the night; injection as before. On the 5th the injection was increased to one grain, and the pill to one grain and a half; on the 9th the injection was increased to one grain and a half, and the pill to two grains, given as before. The spasms now stopped, but the patient continued to have some pains in the back for three weeks, and his legs were still weak and stiff on August 18th, when he was sent to the convalescent home. He was seen some months afterwards in good health. —*The Lancet*, August 26th.

Chorea cured by Chloral Hydrate and Bromide of Potassium.—Dr. Sieveking reports the case of a girl, aged twelve, who was admitted into St. Mary's Hospital, London, on February 29, 1876, suffering from chorea. The disease began a month before, three weeks after a severe fright. The symptoms were well marked, the clonic movements involving chiefly the muscles of the arms and neck. She was ordered two drachms of the juice of conium, three times a day, and the quantity was increased three days later to four drachms. On March 10th, the conium was discontinued, as there was no material improvement, but it was given again on the 13th, and continued for four days without benefit. Faradization of the spine and extremities twice a week was then ordered, but after the second application the patient became so much worse that she had to be tied to the bed. She was quieted for the time by chloroform inhalations and morphia subcutaneously, and at the same time ten grains each of chloral hydrate and bromide of potassium were ordered every three hours. Under this treatment she at once began to improve, and four days later the medicine was ordered three times a day. The improvement was now progressive, and on May 23d the patient went out perfectly well, with the exception of occasional slight choreic movements of the hands when under the influence of any excitement.—*The Lancet*, August 26th.

Diseased Milk.—Dr. Payne, medical officer of health for Cardiff, in his last report gives a good description of diseased milk (from foot and mouth disease) from examinations made by Mr. Thomas. In the first stage of the disease the only change consists in the presence of small particles of solid matter-fat in a star-like form. As the disease advances, these star-like masses become larger and larger. This is especially the case if the milk has remained long in the udder. When the disease has attained its height, and the milk-glands, either from sympathy, fever, or local causes, become attacked, the milk generally gives a strong acid reaction, while at the same time the casein is uncoagulated. The casein appears to exist in a modified form, several such samples having withstood the action of strong acids for some time before coagulating. If the milk while in this state be slightly agitated for a short time, masses of fat rise to the surface, and from a pint of milk it is easy to obtain an ounce or an ounce and a half of butter. Healthy milk, if shaken for twice the time, will produce no such amount. The color of the milk when much diseased is yellowish brown, and its strong odor and greater consistency easily distinguish it from healthy milk. If water be added to it when

freshly drawn from the cow, although the color and consistency are reduced, the fatty masses are not dissolved, and are easily recognized. Microscopical examination of the milk reveals its extreme richness, and epithelium in very marked scales. The most marked and constant indication of the disease is the tendency of the apparently healthy fat-globules to congregate in masses. When the globules have agglomerated their shape changes from round to oval, hexagonal and broken-down forms, and the masses are often so dense as to present a black appearance under the microscope.—*The Lancet*, August 26th.

Diffused Melanosis.—Dr. Kirkley, of Toledo, Ohio, reports a case of this rare disease. The patient was a woman, aged thirty-four. Her grandfather is said to have died of carcinoma. In April, 1870, the patient's left eye was enucleated for melanosis. After this she remained well with the exception of periodical attacks of acute dyspepsia, until December, 1874, when she began to suffer from excruciating pain in the right hip, extending down the thigh, the attacks occurring between 2 and 4 P.M. daily. Alternating with this were severe gastric pain and frequent vomiting. In April, 1875, the trochanter became more prominent, the knee semiflexed, and the foot rotated inwards, and the least movement caused great suffering. The liver was enlarged, and two tumors—one as large as an orange, evidently connected with its surface, could be felt in the right hypochondrium. The patient died of exhaustion on April 20th.

At the autopsy five to six pints of a highly colored fluid resembling bile were found in the peritoneal sac. The omentum was somewhat disorganized and completely covered with melanotic deposit. This was also abundant in the peritoneal investment of the intestines, and at isolated places in their walls. The liver extended entirely across the body, was about twice its normal size and weight, and its surface was irregular and nodular. The nodules were harder than the surrounding tissue, varied in size from a small pea to a large orange, were dark colored, and when incised presented the same appearances as the melanotic deposits elsewhere. The substance of the liver was in a state of amyloid degeneration. The tumor felt during life was a large nodule situated on the anterior surface of the right lobe of the liver. The right kidney was somewhat atrophied. The other organs were healthy. The right leg was shortened two and a half inches, and the foot was everted. The neck of the femur was entirely disorganized, could be easily broken down by the finger, and presented the same melanotic character as the peritoneum. The head of the bone and the acetabulum could not be examined. —*Ohio Medical Recorder*, Sept. 1876.

Reduction of Dislocation of the Hip-joint by manipulating the Femur over a Fulcrum in the Groin.—Dr. Sutton recently reduced in this way a dislocation into the ischiatic notch, of four weeks' duration, that had resisted all other methods of reduction. The patient was anæsthetized, and a piece of muslin rolled up into a firm pad between two and three inches thick and about fifteen inches long, and secured by a piece of string, was placed in the groin to act as a fulcrum. The thigh was now flexed over this, and by the leverage thus obtained the head of the femur was raised out of the ischiatic notch, and also high enough to pass over the rim of the acetabulum. The leg was then flexed upon the thigh, and the knee pushed forwards toward the sternum, in order to place the head of the femur on a level with the cotyloid cavity. The knee was then moved outward, and at the same time an up and down movement given to it to break up the adhesions about the head of the femur, and facilitate its return to the socket. While making these movements, which required but little force, the knee was slightly raised, the leg being still abducted, and the bone glided into its proper place. The time occupied in reducing the dislocation was between five and ten minutes. The patient has since recovered.

This makes the fourth case in which dislocation of the femur, after all other means had failed, has been reduced with remarkable facility by manipulation over a fulcrum in the groin. Three of the cases were dislocations on the dorsum ilii, and one into the ischiatic notch. Dr. Sutton claims many advantages for the method, the principal of which is the ease with which in this way the head of the bone is raised out of the ischiatic notch, and over the rim of the acetabulum.—*American Practitioner*, September, 1876.

Gunshot Wound of the Skull; Ball retained seven Years; Operation; Cure.—Dr. Demme, of Philadelphia, reports the following interesting case. In September, 1868, a young man shot himself in the right side of the head with a single-barrelled pistol loaded with several balls. He was unconscious for a considerable time. On the same evening several pieces of bone and a ball were removed. He was in a critical condition for a long time, but finally recovered and returned to his work. He remained perfectly well until June 17, 1875, when he became overheated at work, and complained of a dull, heavy, dizzy feeling in his head. On the same evening he suddenly fell back unconscious, and when seen by Dr. Demme soon afterwards, he was totally unconscious, with contracted pupils, high fever, full, hammering, slow pulse, and dry, hot skin. At the same time there were violent clonic spasms of the entire left side, the muscles of the leg, arm, and left side of face being in constant spasmodic action. Under the use of leeches to the right temple, revulsives to the limbs and spine, and active purgatives, the symptoms rapidly ameliorated. The next day he was conscious, and in a week he resumed work. He now began to suffer from intense neuralgic pain in the head, from which the remedies used gave him no relief. In August he had an attack similar to the above, but less severe. The attacks were repeated every few months, and the pain in the head became almost unbearable. Frequent examinations revealed at the upper end of the furrow caused by the gunshot wound, about half an inch above the ext. aud. meatus, a spot exquisitely tender on pressure, and slightly elevated above the level of the skull. On the 8th of April, an incision was made down to the skull, and this prominence freely exposed. It was found to consist of an irregularly elliptical bony elevation, about five-eighths of an inch in its long diameter. This was cut through with a chisel, and a pistol-ball was found imbedded in the bone, and was with considerable difficulty removed with an elevator. The ball weighs fifty-seven grains. During the four and a half months that elapsed between the operation and the writing of Dr. Demme's article, the patient had had no return of his former troubles, but continued to enjoy excellent health.—*Medical and Surgical Reporter*, September 16, 1876.

A New Journal.—A new Italian journal, under the name of *L'Indipendente*, is being issued in Turin. It will be the continuation of the *Gazzetta Medica di Torino*.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

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PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, October 28, 1876.

THE SANITARY CONDITION OF PHILADELPHIA AND THE EXPOSITION GROUNDS.

As foreshadowed in our editorial of last week, we have taken special pains to make inquiries into the basis of the reports that have been widely circulated regarding the insalubrity of Philadelphia, and especially of the Exposition grounds.

A Commission from the RECORD has spent several days in making a sanitary inspection of those localities where hygienic precautions are said to have been neglected, and in co-operation with several medical men in Philadelphia has gathered sufficient data to form a tolerably intelligent idea of the nature of the affections that have prevailed in and about the grounds this season.

The task has been one of uncommon difficulty, as is usual in such cases; but we are glad to chronicle the results of the investigation, both in justice to our Philadelphia friends, whose grand efforts this Centennial year has been crowned with such unexampled success, and also for the benefit of that small number who may have deferred their visit to the Centennial city until the sanitary state of the case had been fairly presented to them. This, we believe, we can now do with sufficient accuracy for all practical purposes.

We may at the outset sum up a few of the more important facts that have made themselves evident. So far as the sanitary condition of the grounds are concerned, they may be regarded as fairly good. There have undoubtedly been numerous instances of mild affections attributable to irregularities in diet, excessive fatigue, mental excitement, or the influence of the extraordinarily hot weather of the summer, especially among the visitors to the Exposition, but these affections have in almost all cases yielded rapidly under treatment.

Typhoid fever and allied febrile forms have unquestionably been much more prevalent than last year, but the comparative mortality from such causes has been largely surpassed even this year by at least one of the large cities which was visited as usual during the same season by immense numbers from all parts. How justly we have been entitled to the conclusions just given, may best be judged by our readers after a survey of the data from which they have been derived. And first for the Exposition grounds.

To appreciate the task that lay before the engineers in devising effective drainage and sewerage for this new territory, it will be best to consult the map. We shall there see that this three hundred acres of land is skirted on its eastern borders by the Schuylkill river, and that it is traversed from east to west by ravines which would naturally pour their waters into the river as it flows by. This very river water, however, is utilized for drinking and other purposes in the city of Philadelphia; for only a short distance below, at Fairmount, it is pumped up into a supply reservoir. Below this point again the river is dammed, and below the dam it receives much of the city sewage. It is unfortunate that only a small portion of the grounds slopes towards the south, or in the direction of the Schuylkill below the dam, so that it was thought impracticable by the engineers to carry all the sewage in that direction. Upon this southern slope, however, are the Main and Machinery buildings, so that a very large part of the waste really escapes to the southward, and emptying into the Elm Avenue sewer, on the southern line of the grounds, finds its way into the Schuylkill below the dam.

On the rest of the grounds, from the Avenue of the Republic northward, the slope is mainly in an opposite direction, and here it is that the sewage is not carried into the city sewers, but is stored up temporarily in cesspools. This arrangement is thought to be perfectly safe, and the best practicable, because while the soil itself is clay, the subsoil is gravel, and much of the liquid matter passes away through this natural filter. The residue is removed once or oftener daily, by odorless excavator companies, there being between seven hundred and eight hundred dollars paid to these companies per week for their work. They appear to do it well, removing the waste in closed carts. Owing to the excessive use of water for various purposes on the grounds, it was found impossible to provide for all waste in this manner, and a certain amount of the purely fluid matter has been allowed to pass into the two ravines, the Landsdowne and the Belmont, where it mingles with the surface stream. The former is the larger, and is artificial, carrying off the overflow from the principal lakes.

The water for the supply of these lakes is chiefly supplied by the Centennial Commissioners' own mains, the water being pumped up from the Schuylkill at a point intermediate between the outlet of the Belmont and Landsdowne streams, above the dam. In following down the Landsdowne stream it appears clear, and has no odor for certainly more than half its course. Then it receives sewage behind the Restaurant Lafayette, and at a point still lower down the escape from

a urinal. The drains of the walks and drives also empty into it, but in dry weather little or nothing passes them. Arrived at the Hunters' Camp, a short distance from the eastern limit of the grounds, the water is allowed to collect and form an artificial pond, in order to float one or more canoes. Here the water is really turbid, and is covered with scum, and has become a nuisance, giving off foul sewer gases, which above were only slightly noticeable. Instructions are now issued to drain off the pond nightly, by lifting the sluice-gate, thus emptying it entirely. It is then filled up again during the night with fresh water. Notwithstanding, however, the contamination of this water, it is tolerably clear when it makes its first escape. Indeed, it has a fine opportunity to aërate and so oxygenate and purify itself as it dashes down over its stony bed, being tossed hither and thither in its winding way. Most of this contaminated water comes from the restaurants, and is chiefly from the washings of dishes, the minute particles of organic matter suspended in it being mostly from cooked food. Where the little Belmont stream empties, it is said that the force of its fall carries the matter sufficiently far out into the main current of the river, and that as it passes down towards the dam it is prevented from mixing with the water pumped up into the grounds by a long, narrow island which intervenes. The influence of this little stream must, in ordinary times, be very inconsiderable on the quality of the river water, though it is conceivable that heavy rains may carry down a large amount of surface washings. Such solid matter as has not been provided for in the ways already stated, as, for example, kitchen garbage and table waste, is collected in barrels, properly disinfected by the sulphate of iron, Girondin's fluid, or chloride of lime, and removed twice daily. A force of inspectors keeps the grounds under constant surveillance, and authority is given to instantly revoke the license of any establishment not adhering to regulations. It is true that in the latter part of May it was found that the Schuylkill water at Fairmount had become polluted, containing thirty-eight parts per million of sewage. Owing to the exertions of the Chief Engineer, the sewage soon was reduced to three parts per million. According to the more recent reports of Dr. Cresson, the water used in the Exhibition grounds only contain about 1.74 parts per million of sewage, a quantity which is regarded as extremely small. After a rain it is said to be discolored, which is held on good authority to be owing merely to an admixture of clay.

As for the walks and drives, they are kept constantly swept by a gang of about one hundred and eighty men, and the sweepings are carried away; but it is manifestly impossible with the dense crowds in daily attendance to keep that sanitary order which might be wished, for with the great majority of visitors the place is nothing but a huge picnic ground, and when they have disposed of the noon-day lunch brought with them in the shape of bread and cheese, ham, sausages, home-made pies, hard boiled eggs, and the like, they throw the remains where it is most convenient, the result being to clog up the water escapes around the fountains and springs, and were it not for the nettings and gratings, the little streams in the ravines. Notwithstanding, however, these drawbacks, the universal testimony given in answer to inquiries of those employing large numbers of men about the grounds, especially such as have slept there, is that there has been very little sickness among them, indeed no more than in ordinary times and in other places.

We are not prepared to say that the arrangements for carrying off sewage and drainage are all that could be desired; indeed, it is clear that the supply water of the city is contaminated by the sewage of the grounds, but it is contended that the plan adopted was the only effective one that could be devised for the greater portion of the grounds; and, again, that this matter is so largely diluted with ordinary Schuylkill water that the taint is minimal. As for the sanitary condition of the grounds themselves, it is still to be proved that they have caused any unusual disease; and this is the more remarkable when it is considered that the whole soil has but recently been turned over, and has therefore been in that condition which is supposed to breed malarial affections. It is said that there was at one time a form of trouble prevalent that has been called sun-fever or sun-exhaustion. It prevailed extensively at the grounds during the intensely hot weather, many of the military guards being struck down by it; but the patients recovered quickly when removed from the influence of the sun, or after a trip into the country. One practitioner gives a number of instances in which his patients had experienced a continued fever for several weeks, fully half the cases having been affected previously by sun-fever; they had sometimes the rash of typhoid, but not the abdominal symptoms. Those attacked were mostly residents of the city, and were scattered over it in all directions. The type was mild, and all got well.

Ordinary diarrhœal or gastric disturbances have certainly been common, as they are in any places where the visitors are exhausted by fatigue or excitement. There can be little doubt, however, that typhoid fever has been quite prevalent in Philadelphia for some time past. According to the returns of the Board of Health, the number of deaths from this cause in the last week of December, 1875, was 13, or 1.57 per 100,000. Before the opening of the Exposition the Centennial ward (24th) had an estimated population of 11,310, the largest, with but two exceptions, in the city. But, leaving out of account that the actual increase in numbers has probably been greater in this ward than in any other, we find that the rates of mortality have been actually less than in several others. Examining the death returns of typhoid fever for the week ending August 5th, when a very marked

increase in the death rate took place, to the week ending Oct. 7th inclusive, we find that the disease was scattered irregularly over the city, while it showed somewhat of a preponderance (not very marked) in some localities. The highest rate of mortality was in the 29th ward, where it was 73.6 per 100,000, or 25 in a population of 33,974. In the 10th it was 44.3, or 11 in a population of 24,786. In the 20th it was 43.0, or 18 in a population of 41,854; while in the 24th it was only 38.9, or 16 in a population of 41,310.

The conditions of the dense pile of structures just outside the grounds is one that would naturally be thought to invite every form of zymotic disease. We are informed, however, that this whole area is kept under constant inspection by the Board of Health, and no nuisances are allowed. Many of the buildings, however, are said to have no sewer connection. Practically, however, the returns from this whole section, comprising also the Centennial grounds included in the 24th ward, have not shown an increased ratio of mortality over other wards in the city. This also is remarkable, if it is true as claimed, that most of the Centennial employees live in the ward.

Whatever may be the sanitary conditions of the large hotels, their attachés and physicians do not give any clear-cut histories of typhoid fever cases among the visitors, very many of whom have lived there the greater part of the summer. In three of the largest hotels there, no trustworthy evidence could be obtained that the hotel employees had suffered from malarial or any miasmatic disease, excepting from intermittent fever in a single case.

In regard to the health of the city, an inspection of the records in the Presbyterian and Pennsylvania hospitals sustain the official records, and show that there has been a marked increase in the number of typhoid cases, amounting, perhaps, in round numbers to three or four times the usual number at this season. There has also been about an equal increase in the cases classed as typho-malarial. But while those classed as genuine typhoid have been fully as severe as usual, the typho-malarial cases have been quite mild in character.

Through the kindness of one of the medical officers of the Philadelphia Hospital (Almshouse), we have been furnished with some data from that institution, and we insert the results as prepared in tabular form. A comparison is here made between the fever cases admitted during the months of August, September, and October of 1875 and 1876.

1876.

	Total treated during July, Aug., Sept., 1876.	Cured.	Died.	Centennial in origin.	Remaining Oct. 1, 1876.	Patients recd in medical wards, Jan. 1, to Oct. 1, 1876.
Typhoid fever...	16	5	5	2	6	2191
Typho-malarial..	6	4	2	2	1	....
Typhus fever...	..	..	..	..	..	....
Remittent fever.	2	2	..			....

1875.

Typhoid fever...	9	7	2	..	..	2128
Typho-malarial..	4	3	1	..	..	....
Typhus fever...	..	..	..	..	..	....
Remittent fever.	4	4	..	..	..	....

The very large number of patients admitted annually to this hospital furnish us with a tolerably good criterion for deciding on the prevalence in typhoid and other allied affections as compared with last year. It will be observed that the number of typhoid cases had not doubled over last year, that typho-malaria had somewhat increased, remittent diminished, and there had been no typhus recorded. These figures therefore agree with the opinions expressed in the letter from Dr. Pepper, which we insert, though in the other hospitals of which we obtained data, the increase in typhoid was much more marked.

It is well known that typhoid is apt to be prevalent in various sections of the country at this time, and the authorities are inclined to think that much of it is imported by persons who have become poisoned with the disease, which has broken out under the fatigue, loss of sleep, excitement, induced by a visit to the Centennial.

Certain it is that Philadelphia is not the only city that has been so affected, for while the highest death ratio for typhoid was 3.77 per 100,000, which was for the week ending August 26th, we are informed through French statistics, that in Paris the ratio was 4.69 per 100,000 for the week ending August 17th, and a nearly equally high ratio was maintained for several weeks. We take great pleasure in introducing here the letter already alluded to from Dr. Pepper, Medical Director of the International Exposition, written to a member of the RECORD COMMISSION. It speaks for itself, and may be regarded as an authoritative expression of opinion on the part of one who has had unequalled facilities for observation.

We are glad to say that his statements are in the main our conclusions, though in some special localities we appear to have found that the mortality from typhoid was somewhat increased over his experiences.

"In reply to your questions about the general health of Philadelphia during the past five months, and particularly in regard to the prevalence of typhoid or typho-malarial fever, I will make a few brief statements. I enclose a copy of a circular recently issued, from which it will be seen that the general health of Philadelphia during the period named has been exceptionally good. This result, obtained from the official data of the Registrar's office, is confirmed by the records of hospital and private practice. It is, however, undoubted that there has been a larger proportion of febrile affections during a portion of this period than is usual. The forms which these affections have assumed are simple intermittent fevers, typhoid, and typho-malarial fevers, and catarrhal fevers with marked prostration. All alike have been mild in type and amenable to treatment. The typhoid fever, in particular, has been characterized by an absence of severity, and by a tendency, in many cases, to abort at some period during the third week. Care-

ful enquiry has failed either to detect anything peculiar in the forms of disease prevalent this summer, or in the distribution of sickness in the various parts of the city. It has certainly been impossible to trace any specially unhealthy influences in connection with the grounds of the International Exposition, or their immediate neighborhood. It is perfectly well known that probably in consequence of the unfavorable climatic conditions of the past summer, there has been an unusual amount of malarial and typhoid fevers throughout the Middle States since the beginning of August. When we reflect upon this, and upon the vast multitudes—millions in number—who have thronged this city (Philadelphia), during the past five months, it must seem remarkable that such great freedom from disease and so low a rate of mortality should have been maintained. In a number of instances which have come under my own observation, typhoid fever has made its appearance in persons visiting this city so soon after their arrival as to make it evident that it had been contracted on their route. It is unnecessary to remind you of the powerful predisposing influence exerted towards the contraction of all febrile diseases by excessive fatigue, insufficient sleep, excitement, irregular and improper meals, and many other depressing causes. I presume that pleasure-seekers are at all times supremely indifferent to the importance of hygienic rules, but I think that such indifference can never have been more conspicuously displayed than by many of the visitors to the Centennial International Exposition. The great majority of those who have been taken sick during, or consequent upon their visit, have themselves only to blame for it.

"In conclusion, I would repeat that the febrile affections which have occurred in Philadelphia during the past five months have presented no special or unusual features whatever, but have been of the same type as those which have prevailed so widely over the Middle States during the same period; that no special causes have existed here for their development, and that they have occurred here in about the same proportion to population as elsewhere; and that the vast majority of the cases that have occurred have been due, not to any specially unhealthy influences connected with the Exposition Grounds, but to exposure during travelling, or neglect of the laws of health while here."

We feel obliged to offer a few words in explanation of some figures that are contained in the circular referred to in Dr. Pepper's letter. It is shown that in New York there has been a heavier weekly death rate than in Philadelphia—171.9 as against 83.8—from diarrhœal affections and typhoid fever during the summer months of this year. It might be inferred from this that the average typhoid mortality was heavier here than in Philadelphia, while the reverse is the case. Our weekly mortality from these causes has never been as large this season as it has been in Philadelphia, Paris, or Berlin.

What we do suffer from is the diarrhœal diseases of our tenement houses, which do not exist in Philadelphia. The mortality from these causes, which is chiefly among infants in the summer season, makes our rates high for typhoid and diarrhœal diseases, if they are tabulated together. We see no reason, however, to combine them, as typhoid is distinct from many diarrhœal diseases, both in its nature, and perhaps in its cause.

We are not in the possession of sufficient facts to say to our Philadelphia friends that we can account for the increase of typhoid fever among them, for we are not aware how prevalent the disease has been elsewhere; but we may safely say—and this, perhaps, they will themselves admit—they have certain conditions present among them that are generally supposed to favor the production of typhoid, viz.: an impure drinking water and imperfect sewerage.

The water supply, as taken from the Delaware river, is notoriously bad, as any one can testify who has seen the water at the point where it is pumped up. It is not only polluted with the city sewage, but being near the mouth of a sluggish stream, cannot fail to absorb some of the waste which is borne down by the current from the factories and works on its banks.

The supply from the Schuylkill is probably not of such quality as drinking water should be. The river receives the sewage of cities and towns on its banks for miles and miles, and it can therefore hardly fail to be more or less contaminated.

Frequent complaints are made against it by those visiting the city, both as to its color and odor, though it must be confessed that at the present time it appears clearer than the Croton.

As for the sewers and drains, any one passing through the streets will be struck with the fact that an immense amount of waste from the houses runs out in streams down the alleys between the houses, or directly from the houses into the gutters, where it courses along, constituting little rivulets that rush on for considerable distances before they can hide themselves in a culvert. This large exposed surface of foul water, giving off offensive gases, and an impure drinking water, may act as fruitful agents of typhoid and other fevers. Probably, however, they will be harmless to most persons in good health, when ordinary precautions are heeded, which visitors should recognize when away from home. Such care, however, as Dr. Pepper says, is not to be expected of pleasure-seekers.

We have thus endeavored to present the facts of the case as bearing upon the existence and probable causes of fever in Philadelphia. While there is no doubt that the sewerage is very defective, that sewage is mixed to a certain extent with the drinking water, it is pretty evident that the dangers of fever have been very much exaggerated, and that there is very little more risk in visiting Philadelphia than would be encountered in other strange places. To those, however, who wish to take all ordinary precautions, under the circumstances we would simply say: avoid drinking the water, unless it has been boiled; eat warm and nutritious food at accustomed intervals, and guard against over-fatigue, whether of body or mind.

THE AMERICAN PUBLIC HEALTH ASSOCIATION.

The last of the series of remarkable gatherings of 1876, in which medical men have been specially in-

terested, was held at Boston, during the first week of the present month. Rather anomalously, the care of the public health comes in as the last link in the chain, after the national, international, and State associations have met and amply discussed the numerous morbid conditions dependent on its total or partial neglect. Like the moral which so frequently adorned the ending of a story, or a poem in days of old, this meeting of earnest sanitarians casts a suggestive reflection over all the centennial medical convocations that have preceded it. It can scarcely, however, be considered a purely medical association, for in its objects it merits, and to a certain extent receives, the cordial sympathy of thoughtful men of the profession. The lawyer and the civil engineer are listened to with pleasure at all the meetings, but the great majority of the members are medical men, who, for some satisfactory cause, usually of a philanthropic character, are desirous that the objects of the association shall be successfully accomplished. There is really no absolute reason why physicians should be more prominent than any other class of educated men in matters pertaining to the preservation of individual and public health. The purposes in view are common to all, and all should and must realize their importance, before the advent of the hygienic millennium, which now seems like the shadow of a dream in the distant future. The medical man, however, recognizes more keenly than any other the intrinsic value of prevention, from the fact that experience and observation endow him with a daily increasing familiarity with the evils associated with the infraction of hygienic laws. This is the chief reason for his interest in the great cause of human health; an interest of a most disinterested kind, which would inevitably reduce his practical contact with disease to a minimum in proportion as the general health approaches its maximum.

Viewing the Public Health Association from the standpoint of the universal interest that ought to be taken in it, we are surprised to find its meetings attended by only a score or two of sanitarians, although these are almost all active workers. It would not be a straining of the truth very far beyond the line of perfect accuracy, to say that almost every one present read a paper or took part in a discussion. We believe that the same remark would have been applicable, if the numerical representation of Hygeia's devotees had been much greater than it was. Many members of the medical profession had already allotted every available moment of time at their disposal, this summer, to attendance on the centennial medical convention, and could not subtract another week's vacation from the cares of practice. Apart from this, however, a great drawback to the numerical success of the Health Association exists in the fact that it is not a representative body, in the same sense that applies to the general medical gatherings of other kinds, from their mode of constitution. It is made up of individual interests entirely; societies or boards of health are not identified with it officially, by delegates appointed by them; and the members merely represent themselves and their own tastes for this work and their appreciation of sanitary reform. In the present heterogeneous composition of local sanitary boards, the existing arrangement is much more likely to inure to the public benefit. Until these boards are made up of as good moral and intellectual material as that which characterizes the great majority of the members of the American Public Health Association, we sincerely hope that they may never have the opportunity granted them of bringing into so respectable a body the intriguing tendencies and machinations of the political rings and parties of some of our large cities. We honestly believe that some of these gentlemen, who assume to look after local sanitary interests, would scarcely feel at home in the novel position they would occupy in the presence of right-thinking, unselfish men, earnestly engaged in the study of the improvement of the health of individuals and communities.

We publish elsewhere a brief abstract of the kind and amount of work done by this association. Many of the questions discussed were of the gravest importance, and have a practical bearing on all the vital interests of health and human happiness. Their constant agitation, from year to year, must yield in due time such fruit as will make the hygienistic heart rejoice, even though the youngest sanitarian of to-day may be gray in the cause before he witnesses the full accomplishment of his cherished wishes.

Reports of Societies.

PROCEEDINGS OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.

This body held its fourth annual meeting at Boston, October 3d to 6th, inclusive. The officers for 1875-6 were: President, Dr. Edwin M. Snow, of Providence; 1st Vice-President, Dr. John H. Rauch, of Chicago; 2d Vice-President, Francis A. Waller, LL.D., of New Haven; Treasurer, Dr. J. Foster Jenkins, of Yonkers; Secretary, Dr. Elisha Harris, of New York.

Dr. Snow, President, delivered the opening address, in which he particularly alluded to the mountains of ignorance and superstition on the subject of hygiene which must be removed. He also showed how little was known, even by the wisest, of the causes of such diseases as cholera, typhoid fever, etc.

Without dwelling on the details of papers presented, and the points which elicited special discussion in regular order of sequence, we may appropriately examine the work accomplished by the Association under the three divisions of subjects into which the executive committee grouped all the leading discourses, papers, and discussions.

I.—LEGISLATION AND THE APPLICATIONS OF LAW FOR PUBLIC HEALTH PURPOSES.

In this department of the subject of hygiene may be mentioned the following papers, some of which were

ably discussed: Mr. Henry J. Crowell, of Boston, read a paper on "Sanitary Laws to Regulate the Business of Slaughtering, a Necessity," showing many of the evil effects of private slaughter-houses, and commending the abattoir system of concentration, giving a sketch of its various processes. Dr. E. H. Janes, of New York, gave a localized description of the abattoirs of that city, introducing a resolution laudatory of the system, when properly conducted, which was adopted and afterwards reconsidered, and ordered to be printed without endorsement.

An interesting discussion took place on "Expert Testimony in Matters Affecting Life and Health," introduced in a paper by ex-Governor Emory Washburn, of Massachusetts, and participated in by Prof. H. P. Bowditch, of Boston, Profs. Horsford and Ordronnaux, and Dr. L. H. Steiner, of Maryland. The whole subject was ably dissected, and allusion more than once made to the faulty position occasionally assumed by the expert himself, as in the Wharton case, in which one called for the defence claimed to be the representative of one side only. A committee was appointed to inquire into the methods of obtaining expert testimony prevailing in Europe.

Dr. Steiner followed with a paper on "Expert Supervision of the Construction and Internal Arrangement of Public Institutions, in order to prevent Injury to the Health of their Inmates," showing the responsibility of the State in the matter, and the necessity of duly appointed experts who should make thorough inspection and examination.

Dr. Horsford then read a somewhat jocose paper on the necessity of having a house-physician to look after the ailments in every part of the house, resulting from neglect of duty by the plumber, carpenter, etc., to be regularly consulted and paid, just as any other physician would be.

Rev. E. E. Hale spoke of the evils of crowding people together; the laws on the subject were not strict enough. He said that the poet Horace's statement, that death knocks impartially at the palaces of kings and the hovels of beggars, was one of the greatest falsehoods that unveracious poet ever uttered.

Dr. Austin Flint read a paper on "Food and its Relations to Personal and Public Health," arguing that drugs could never take the place of food; that there was no rule as to the amount of food required for any individual outside himself; that the natural desire for food should always be satisfied, and at once; that in all cases the appetite was more trustworthy than the usual arbitrary dietetic regulations, which were sure to lead to bad results.

Prof. J. D. Runkle, President of the Institute of Technology, referred to the "Improvements in the Health of Students." They were not overworked; neither was their health improved after the curriculum was changed. Dietary imprudences were the real causes of impaired health.

J. H. Shedd, C.E., of Providence, read a paper on "Water Supplies for Large Institutions and Small Communities," giving the amounts required, consumed, and wasted, with the characteristics of a good water supply.

Dr. A. L. Gihon, U.S.N., read an essay on "Sanitary Reform on Shipboard," urging an inquiry as to the feasibility of the government regulating the sanitation of men-of-war, passenger and merchant ships, by sanitary inspection on arriving and departing.

Dr. J. M. Woodworth, Supervising Surgeon General U. S. Marine hospital service, then read a paper on the "safety of ships and those who travel in them." He described the sanitary architecture of vessels, and gave very interesting statistics of the losses of life by casualties on shipboard, with special mention of the amount of work done by the Government for the protection of ships and their inmates, and the saving of life.

Mr. Henley, of London, gave an account of "Sanitary Laws and Regulations in Great Britain," showing their satisfactory working.

Mr. Charlton Lewis, of New York, in a paper on "Ancient and Modern Hygiene," showed that increased longevity at the present day was due to greater care of infant life, of the sick and infirm, avoidance of epidemics and of famine, etc.

Dr. J. S. Billings, U.S.A., argued, in a paper on the "Rights, etc., of the Community in regard to Public Health," in favor of the right to enforce measures, even to the invasion of personal liberty.

Col. G. E. Waring and Dr. Ezra M. Hunt, of New Jersey, examined respectively into the "Sanitary Condition of Country Houses and Grounds," and the "Sanitary Appointments of Dwelling-Houses."

A number of valuable papers were read by title.

II.—DANGEROUS EMPLOYMENTS AND HARMFUL PROCESSES.

Dr. E. S. Wood, of Boston, Mass., read a paper on "Illuminating Gas and its Relations to Health," giving an account of the method for procuring greater purity.

Dr. L. F. C. Garvin, of Rhode Island, presented a paper on the "Causes of Accidents in Large Factories," with a list of proposed remedies, such as legal prohibition of the employment of children, enclosure of points of danger, warning to the inexperienced, etc., and the following resolution offered by him was adopted:

Resolved, That the due protection and welfare of factory operatives require: 1. Half-day schooling for children under sixteen years of age; 2. Uniform hours of labor, not exceeding sixty per week; 3. Frequent inspection of the mills and tenement-dwellings of factory villages, and of the milk sold to the inhabitants, by an authorized public health officer.

Prof. W. H. Brewer, of Yale College, presented a paper on "Gases of Decay and the Harm they cause in Dwellings and Popular Places." Sewer gas acted in some deleterious way unknown to chemistry. He examined the mode of production of harmful gases, and their mode of producing disease.

III.—TOPOGRAPHICAL AND SANITARY SURVEYS, AND OTHER SYSTEMATIC WORKS FOR PUBLIC HEALTH PURPOSES.

Mr. James T. Gardner, C.E., read a paper on the relations of such surveys, etc., to public health, showing the action of the earth's surface as a cause of disease, etc.

Dr. J. M. Jones, of Washington, D. C., read a paper on "Suggestions for Increasing the Water Supply of Cities, and to Encourage its Free Use as a Sanitary Measure," in which he urged the necessity of providing against inadequacy of supply in the future, and of supplying vastly greater quantities of it to secure improved hygienic conditions.

The Committee on Proposed Sanitary Survey of the United States reported progress, and their plans of future operations.

The following officers were elected for 1876–1877, the next meeting to be held in Chicago: President, Dr. John H. Rauch, Chicago; First Vice President, Dr. L. H. Steiner, Maryland; Second Vice-President, Dr. E. M. Hunt, New Jersey; Treasurer, Dr. J. Foster Jen-

kins, New York; Secretary, Dr. Elisha Harris, New York; Executive Committee, Dr. John M. Woodworth, Surgeon General, Marine Hospital, Dr. John S. Billings, U.S.A., Dr. Jackson S. Schultz, New York, Dr. A. L. Gihon, U. S. N., and Dr. Charles F. Folsom, Boston.

Resolutions were passed of sympathy with the medical men of the South, and with those localities now suffering from yellow fever; and asking an investigation into the causes. After resolutions of thanks, etc., the Association adjourned *sine die*.

Correspondence.

ANTISEPTIC HERNIOTOMY.

To the Editor of The Medical Record.

Sir:—Lister's recent presence in our midst, and his earnest championship of the antiseptic methods which he has so long advocated, would seem to justify a report of the following case, in which every step of the operation was in strict accordance with his teachings, his own spray-producer and antiseptic dressings employed, and the result an entire success, although the operators had not previously made use of the method.

In May last, Mr. ——, living out of town, slipped while running. The right testicle of this gentleman had never descended into the scrotum. Its habitual position was just outside of the external ring, or within the inguinal canal. He had found it impossible to wear a truss, and had never had hernia. In slipping he fell, and a swelling appeared in the groin above the testicle, attended by pain, nausea, and signs of strangulation. Reduction was impossible. The symptoms of strangulation slowly disappeared, and for domestic reasons an operation for the relief of the painful incarcerated hernia was postponed until the autumn.

Oct. 9th, under the carbolic spray, the tumor was cut down upon by Dr. Van Buren and myself, Dr. Stimson assisting. The testicle was found to be atrophied, the tunica vaginalis communicated with the peritoneal cavity, and contained a piece of omentum as large as a pullet's egg, bound fast by firm adhesions. These were torn and cut away, but reduction was still impossible, without calling for such an enlargement of the internal ring as seemed unadvisable. The neck of the pediculated lump of omentum was therefore tied with carbolized catgut, cut off, and the stump and ligature reduced through the internal ring into the abdomen. The spermatic cord was tied with carbolized catgut, the atrophied testicle removed, the wound closed with catgut sutures, and the proper dressing arranged with an antiseptic spica bandage.

Oct. 10th, at night the pulse reached 102 and the temperature in the mouth 100⅗. The next day pulse 92, temperature 99⅘. Oct. 12th the patient sat up in bed, pulse 88, temperature 98⅗, and so on. On the fourth day the patient eat his beefsteak as usual. On the sixth there was a copious evacuation of the bowels. On the seventh the parts were entirely healed, except a little subcutaneous pouch above the scrotum, where a piece of catgut ligature which had not been absorbed remained attached to the stump of the spermatic cord. No further antiseptic dressings were used. The patient got up and walked a little on the eighth day. About three grains in all of bimeconate of morphia were given through the week, and a half-grain suppository at the time of the operation—no other medicine whatsoever. A truss was applied during the second week, and the patient authorized to go out of doors.

E. L. Keyes.

210 Madison Ave.

HISTORY OF THE NERVE THEORY OF HAY FEVER.

To The Editor of The Medical Record.

It seems to be a part of the law of evolution, as applied to the progress of all new truths in science, that they are received at first with indifference; secondly, with ridicule; and thirdly, with contests in regard to priority. The nerve theory of hay fever having passed through the first and second stages, appears to already have advanced sufficiently far in the third to be twice criticised for not being original with its author.

In the last issue of the Record, Dr. Neftel claims to have suggested and used galvanism for ordinary asthma before I had suggested or used it for hay fever. His statement is doubly erroneous: 1. If the nature and symptoms of hay fever were as well understood by the profession as I hope in a few years they will be, it would be unnecessary for me to state in reply that asthma is but one of an immense number of symptoms that belong to hay fever, and that it is not found in all the cases.

2. Galvanism was used for ordinary asthma long before Dr. Neftel or myself was born. It was used scientifically, and in some cases successfully, by that famous experimenter in electricity, Dr. Wilson Phillips of England, in the early part of this century.*

Yet further, there is little evidence as yet that the special symptom of asthma that complicates many cases of hay fever yields to galvanic treatment as well as ordinary asthma; but on this point more facts are called for. It is certain that nitrite of amyl, that answers so well in ordinary asthma, has thus far failed in the asthmatic symptoms that accompany hay fever, the reason being, I suppose, that in hay fever the exciting causes are constantly acting.

In a recent issue of the *Boston Medical and Surgical Journal*, a reviewer admits that the nerve theory accounts for the phenomena better than any other hypothesis, but intimates that I should have given credit to Dr. Wyman for his suggestions on the relation of the nervous system to the disease. The original suggestion that hay fever might in some cases be a nervous disease was made by Dr. Pirrie of England, in his work on hay asthma, published in 1867. Dr. Pirrie thought there were two forms—one affecting the mucous membranes, the other nervous; but this decision is unwarranted. Moreover, Dr. Pirrie added no new facts or reasonings on the subject, and did nothing to develop the nerve theory. For the single suggestion he deserves credit, and he received it in my work. But in science it has long been established that theories are rarely or never developed and made fruitful by those who, in a dim and uncertain way, originally suggest them. The Darwinian theory of natural selection, as is now acknowledged in Europe, was originally

* See Noad's Lectures on Electricity: London, 1844, p. 240, quoted in Beard and Rockwell's Medical and Surgical Electricity, first edition, p. 598. The last quotation is as follows: "By transmitting its influence (galvanism) from the nape of the neck to the pit of the stomach, he gave decided relief in every one of twenty-two cases, of which four were in private practice, and eighteen in the Worcester Infirmary. The power employed varied from ten to twenty-five pairs."

From that early period to the present moment no *recorded* advance has been made in the galvanic treatment of ordinary asthma. What new methods have been discovered and have been kept secret with the discoverers, I have no means of knowing.

suggested by Dr. Wells of South Carolina; but if a Darwin had not lived, the suggestion would have died with its originator. The history of medicine is filled with major and minor analogous cases.

So far from corroborating in the main the views of Dr. Wyman, as the above mentioned reviewer declares, our conclusions are diametrically opposed. Dr. Wyman regrets that he knows nothing of the nature of hay fever; makes a distinction between the rose-cold and autumnal catarrh; says the disease is confined within definite geographical limits. On the other hand, I claim to have established by a combination of inductive and deductive investigations, that hay fever is essentially a neurosis; that there is no distinction between the early and later forms; but that all forms, whether occurring in June, or July, or August, or September, or in the winter, in this country or in any country, are one disease; that it is found in all or nearly all parts of this country, and that many of the so-called exempt regions, as shown on maps, are filled with hay fever.

Two books more unlike in their leading conclusions were never written.

G. M. Beard.

METROPOLITAN PRACTITIONERS AT WATERING-PLACES.

To the Editor of The Medical Record.

Saratoga Springs, Oct. 6, 1876.

Sir:—Your editorial article in the Record of Sept. 23d, entitled Rural Practitioners and Metropolitan Physicians, refers in such a manner to the letter from a Saratoga physician, that I seem invited by you to explain my position as to certain allegations in said letter, which you state I have acknowledged my willingness to substantiate. I am even more called upon to do this, by your presumption, that I am probably misinformed in regard to the facts, for in that case I must have stated what is untrue. Of the principle discussed in your editorial, and your distinction between the metropolitan practitioner of high standing and the typical hotel physician, allow me a passing notice. To the first, with such professional characteristics as command respect and esteem, we accord all you have to say; and in describing the latter, you have pictured the genus referred to, in the letter from your Saratoga correspondent; for the letter *particularizes* those who "come with an eye to business, and lose no opportunity to publish their presence in our midst." To these alone the article refers, and there follows certain statements elucidating some of the various ways in which the position of typical hotel physician was sustained. It is with these statements I have to deal, and it is not surprising that emphatic denial is given to them, for none can suppose that individuals would be willing to claim proprietorship in such unpalatable exposure. That none of the so-called "charges," in the opinion of the gentleman who interviewed me, were sustained, is not surprising; for it was useless to discuss statements of such a nature, with one whose purpose it was to give them denial. Personal explanations are not most pleasing in the columns of a public journal, but as I am called upon by yourself editorially, and by the appearance of a personal letter in the Record of Sept. 30th, I beg your indulgence.

The statement that, in the knowledge of the writer, M. C. E. is the only man who is generally talked of and admitted to be a "hotel physician," is entirely gratuitous.

The writer then refers to his personal connection with the matter, and after alluding in general terms to what he calls the "charge," and stating that the number of metropolitan practitioners in Saratoga was so small their names must be known to the profession in New York, and concealment would be useless, comes to the so-called specific point. That my authorship of the article was in any sense of the word denied is false, and the writer of the assertion could hardly believe his own statement, when, if he reflected at all, he must have known the name of the writer was in possession of the Editor of The Record. First, as to requesting permission to put up a sign in one of the hotel offices. The writer asserts I denied to him that he was referred to, while Dr. J. is positive I stated to him the contrary. By one of these gentlemen I have certainly been misunderstood, and that there may be no further uncertainty on this matter, I now state emphatically that I did not refer to Dr. Lente—that I never made such a statement publicly or privately in regard to him, but referred to another M.D. then practising here; and I do hereby certify that one among my other authorities for this statement in regard to the hotel sign, is the very writer of the article of denials. Second, as to the finding of the card. The writer assumes that this is "too absurd for any one to notice;" and yet, if it *was* found, it was "placed there by some one interested in injuring me, or in bringing discredit on—all of us." It is unfortunate for the writer that he had no better control over his cards, so as to prevent their indiscriminate distribution, and as no assertion has ever been made that he placed it in its unfortunate location, it is surprising that he can take no other view of the subject than is involved in his ungentlemanly innuendo. The circumstances connected with the card are as follows: The patient was under the professional care of Dr. J. G. Bacon, of this village, and at one of his visits the patient handed a card to Dr. B., on which was the name of our worthy writer and his then present location, which the patient stated he found sticking in his door, having been placed there during his temporary absence from his room, and I herewith submit to you, Mr. Editor, the certified statement of Dr. Bacon in regard to this matter, which you may publish or not, at your pleasure.

Lastly, in regard to "circulars." On referring to the letter from your Saratoga correspondent, you will find these words: "Another heralds his presence here by circulars, and announcements in the journals of the date of his coming and departure." The writer then alludes to my reference to a notice in the *Medical News and Library*, which he terms "a friendly notice by the editor, of my removal to Florida." Will you, Mr. Editor, please refer to the November number, 1875, of this monthly. If that is "a friendly notice of my removal to Florida," it is geographically unfortunate for the gentleman that it distinctly heralds this practitioner's presence in future at the Grand Union Hotel, Saratoga Springs, where he may be consulted professionally." If you will refer to the July number, 1876, of the *American Journal Med. Sciences*, you will there find an article on Spasm of the Heart, which the writer is pleased to date as follows: Saratoga Springs, June to Sept.; Palatka, Fla., Nov. to May." On referring to the number of the Medical Record, July 8, 1876, you will find an account of two cases of severe compound fracture, with remarks, which the same writer is pleased to date "Saratoga Springs, June to September, 1875.") If this is not heralding his location and announcing the date of his coming and departure, what, may I ask, is it? Is it not a special form of professional advertising, and an an-

nouncement to the profession, which might possibly throw in his way more or less professional business that would not come to him if he assumed the position of the metropolitan practitioner, relying upon his reputation; for, as you justly remark in your editorial article on this subject, "such men do not need to advertise their presence in hotels."

Respectfully yours,
R. C. McEwen.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from Oct. 15th to Oct. 21st, 1876.

Woodhull, A. A., Assist. Surgeon. Promoted Surgeon, with rank of Major, to date from Oct. 1, 1876, vice Millhau resigned. G. O. 103, A. G. O., Oct. 13, 1876.

Ainsworth, F. C., Assist. Surgeon. Assigned, temporarily, at Fort Vancouver, W. T. S. O. 134, Dept. of the Columbia, Oct. 9, 1876.

Comegys, E. T., Assist. Surgeon. To proceed to Washington, D. C., in charge of an insane soldier, and upon completion of this duty, avail himself of his leave of absence. S. O. 187, Dept. of Texas, Oct. 9, 1876.

Crampton, L. W., Assist. Surgeon. Granted leave of absence for one month, with permission to apply for an extension of one month. S. O. 196, Dept. of the Gulf, Oct. 13, 1876.

Burton, H. G., Assist. Surgeon. Assigned to duty at Camp Bowie, A. T. S. O. 122, Dept. of Arizona, Oct. 4, 1876.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending October 21, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Oct. 14	1	14	30	4	32	38	1
Oct. 21.....	2	14	23	1	3	46	1

Dr. A. G. Walters, of Pittsburg, Pa.—Dr. A. G. Walters died of pneumonia, at his residence, October 14, 1876. The deceased was sixty-five years of age, was a native of Prussia, and a graduate of the University of Berlin. He went to Pittsburg in 1841, where he soon acquired a brilliant reputation as a surgeon.

Dr. Jules S. Thebaud,—Dr. Jules S. Thebaud was fatally wounded on the 11th of the present month, by the explosion of a cartridge for a breech-loading rifle that he was preparing. A portion of the brass from the cartridge embedded itself in the lung, while a projecting point lacerated the heart. The peculiar position and nature of the wound precluded all idea of saving his life from the first. He lingered in great agony for nine days. He died October 20th, in the forty-ninth year of his age. Anodynes were administered to him by his attendant physicians, Drs. Sands, Reynolds, and Stimson, but never to any great extent at his own desire. The deceased was frequently visited in his illness by Cardinal McCloskey, the Vicar-General, Father Quinn, and the venerable Thurlow Weed.

The deceased was born at Morristown, N. J., on the 28th of October, 1827. He came of old Knickerbocker stock, his father being a member of the old firm, in this city, of Bouchaud & Thebaud. He graduated at the College of Physicians and Surgeons, and, while till young, gave promise of being an honor to his profession, a promise so well fulfilled in after life. Leaving New York, he walked the London, Paris, and Vienna hospitals for several years. In 1851 he returned to New York, and established himself in Leroy place. From the first the deceased was fortunate in practice, and having ample opportunities for the cultivation of his taste for surgery, soon became a skilful operator. His contributions to medical literature, although not voluminous, were always valuable and practical. He was connected at different times with nearly all the hospitals in the city. He was also attached to the Catholic Orphan Asylum, the Foundling Asylum, St. Vincent's Hospital in Eleventh street, and the Colored Home. He leaves a widow and eight children. The funeral services were held at St. Francis Xavier's Church, to which he belonged for many years. The interment took place at Calvary Cemetery.

Officers of the Medical Society of the County of New York.—At the seventy-first annual meeting of the Medical Society of the County of New York, held October 23, 1876, the following officers were elected:

President—Dr. John C. Peters.
Vice-President—Dr. Isaac E. Taylor.
Recording Secretary—Dr. A. E. M. Purdy.
Corresponding Secretary—Dr. F. A. Castle.
Treasurer—Dr. H. P. Farnham.
Censors—Drs. Charles W. Packard and E. H. M. Sell.
Delegates to New York State Medical Society—Drs. R. F. Weir and A. McL. Hamilton.

The following gentlemen were elected members:—Drs. B. C. McIntyre, H. Petershausen, E. C. Mann, C. H. Atwater, D. R. Burrill, E. C. Spitzga, J. C. Davis, J. B. Taylor, and A. L. Ranney.

Dr. H. S. Piffard introduced the following resolution, which was referred to the Comitia Minora:

Resolved, That the Medical Society of New York recommend to its members the adoption of the metric system in writing prescriptions.

Remarks upon the resolution were made by Drs. Piffard, O'Sullivan, Castle, and Sell.

Dr. Victor de Méric, the well-known surgeon and writer, who died recently in London, was an Alsatian. Having established himself in London upwards of thirty years ago, he succeeded by talent and strong force of character in securing a high position among his professional brethren, and also an excellent *clientèle*. He was for a long time upon the editorial staff of the *Lancet*, held several hospital appointments, and latterly was President of the Medical Society of London.

Assaulting a Quack.—An outraged patient of a London quack, in lieu of taking satisfaction out of the principal, assaulted the assistant, and was fined therefor 40s. Although it was brought out in evidence that the defendant was a notorious quack, the duped patient had no redress.

Original Lectures.

LECTURES ON FEVERS.

By ALFRED L. LOOMIS, M.D.,

PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

(Phonographically reported for THE MEDICAL RECORD.)

LECTURE IV.

TYPHOID FEVER (CONTINUED).—SYMPTOMS.

GENTLEMEN:—I will continue the history of typhoid fever, and describe more in detail those variations in temperature which attend its development and mark its progress. As has already been stated, the temperature at the commencement of a typical case of this fever is characterized by morning remissions and evening exacerbations; and by these regular variations often you will be able to make a diagnosis during the first week of the disease. In order to estimate the real value of these variations, it will be found convenient to divide the fever into four periods which shall correspond to the four weeks of the disease.

Usually, the temperature begins to rise about noon on the first day of the development of the fever, and continues so to do until between six and eight o'clock in the evening, when it reaches its maximum height for that day; then there is no change until midnight, when it begins to decline, and by six or eight o'clock in the morning it has reached its minimum decline, which is a degree higher than on the morning of the preceding day. After six or eight o'clock in the morning the temperature does not vary much until noon; then it again begins to rise, and by six o'clock in the evening it has reached its maximum elevation for that day, which is two degrees higher than on the evening of the preceding day. Again, at midnight it begins to fall, and by morning it has fallen a degree, which leaves the minimum temperature for the day a degree higher than on the preceding day. Thus, it rises a degree each day, with regular morning and evening variations, until the eighth day of the fever, when, in most cases, it has reached its maximum height. During the *second week* the temperature remains at about the same maximum degree which it has reached by the end of the first week. There are morning and evening variations of a degree or more, but the maximum of the evening exacerbation remains the same.

During the *third week* the remission becomes more and more marked, and with it the temperature falls, while during the exacerbation the temperature retains the same standard as during the second week. By the end of the third week the morning temperature during the remission will have fallen two or three degrees below the point which it had reached during the second week.

By the time the *fourth week* is reached, or at least by the middle of the week, the temperature becomes intermittent, and with each exacerbation gradually falls lower and lower, until by the end of the week the normal standard of temperature has been reached—it may fall a little below the normal standard.

These are called the typical variations of typhoid fever, yet they are not always present; besides, there are many things which will materially modify them. For instance, marked deviations from the record may be produced by complications which would never have been discovered but for the irregular thermometrical variations. By treatment, for a time the temperature can be very much lowered; but, if the treatment be discontinued, it will again rise. In some cases you will be unable to ascertain the cause of the irregularity.

PULSE.—The pulse is also subject to variations, which correspond very nearly with the variations in temperature, and occur not only on different days, but at different hours on the same day. During the first week the pulse becomes more and more frequent, during the second and third weeks it remains at its height, and during the fourth week sinks to its normal average. During the whole course of the disease it is less frequent in the morning than in the evening.

If, at the commencement of the fever, the pulse is ninety-eight, it gradually increases in frequency, until by the end of the first week it has reached one hundred or one hundred and ten per minute; during the second week it remains at about this height; after that time, it may run as high as one hundred and twenty or one hundred and forty. During the first and second weeks the rate of the pulse and the temperature range correspond, but after this time the parallelism ceases, the failure of heart-power beginning to manifest itself. This failure of heart-power is indicated by an increase in the frequency and feebleness of the pulse, which at this time may reach one hundred and forty per minute, and yet the temperature show no alarming variation. A pulse which remains for five or six consecutive days above one hundred and twenty per minute is a bad omen, for it shows extensive changes in the muscular tissue of the heart. Under these circumstances, the pulse may become irregular and intermitting. Should these irregularities and intermissions occur during the third week, in most cases they are followed by death. With an irregular and intermitting pulse, usually, you will find the first sound of the heart inaudible over the precordial space, and this indicates that prompt and judicious means must be employed to restore, if possible, the heart's normal action, and thus relieve your patient and avert a fatal issue.

The severity of the fever during the first and second weeks of its development is, to a great extent, determined by the frequency of the pulse and the height of the temperature. Although delirium and extensive tympanitis are important symptoms, yet they do not determine the result; but if your patient during the first, or at the commencement of the second week of the disease, has a pulse of one hundred and twenty per minute, and a temperature of one hundred and six, it is very doubtful whether convalescence can ever be established.

You must remember that from feeble heart-power alone the pulse may increase in frequency while the temperature is steadily falling. On the other hand, the pulse sometimes falls almost to a normal standard, while the temperature remains high. In either case, if these changes occur during the second or third week of the fever, they must be regarded with suspicion.

ERUPTION.—We now come to the study of what is known as the "characteristic symptom" of typhoid fever—namely, the eruption. Some have claimed that the eruption should be considered as a lesion of the disease, but I prefer to class it among the symptoms. It makes its appearance between the sixth and twelfth day (dating from the commencement of the fever, not from the day the patient takes his bed, but from the time the first symptoms of the disease manifest themselves), and it is not attended by any unusual sensation.

It remains visible from eight to fourteen days, leaving no stains or mark on the surface after its dis-

appearance. It consists of isolated lenticular spots scattered more or less abundantly over the surface of any part of the body, yet usually most abundant upon the chest and abdomen. There may be only a few spots visible at a time, or it may be so profuse as to cover the body like a rash. Two or three well-defined spots of the eruption are sufficient to establish the existence of the fever. Each spot is circular in shape, and varies in diameter from a point to a line and a half, rarely reaching two lines. It is slightly elevated above the surface of the surrounding cuticle, is of a bright rose color, disappears upon slight pressure, and returns as soon as the pressure is removed. Each spot remains visible for three days, and then disappears. Sometimes, as one crop of the eruption disappears, another is developed, and this may go on for eight, twelve, or fourteen days. There are many cases in which only one crop appears. As soon as one spot makes its appearance, it is well to mark it with tincture of iodine or nitrate of silver, so that you may be certain that your observations are always made upon the one point. If it is a spot of typhoid eruption, and one crop of eruption is to follow another, it will disappear within three days from the time at which it was first seen, and other spots will take its place. It is this feature which distinguishes the typhoid eruption from that of all other fevers.

The question may be asked, is this eruption essential to the diagnosis of typhoid fever? Doubtless, there is no question in connection with its history which has given rise to more discussion than this. As a matter of course, this question has two sides. Many observers mention that the eruption is not constant, and consequently not necessary for its diagnosis; while others, equally competent, maintain that unless the eruption be present at some period during the progress of the disease, the diagnosis of typhoid fever cannot be made with positiveness. Jenner states that he found the eruption present in one hundred and forty-eight out of one hundred and fifty-two cases. I would not say that it is possible for typhoid fever to occur without the eruption, neither would I affirm that scarlet fever ever exists without the characteristic rash of the disease; but I do say that, as regards these respective fevers, I would make the diagnosis with equal hesitancy in the one case as in the other.

The eruption is usually most marked in cases of typhoid fever which occur between the ages of ten and thirty. Before ten and after thirty years it is usually not as well marked, and may be readily overlooked unless careful search is made.

I have now described to you the prominent symptoms which are present during the course of a typical case of typhoid fever, yet I believe I have given you sufficient detail to enable you to recognize the disease and to manage intelligently your typhoid fever patients.

At this point let me state to you that the typhoid poison in its operation on the human body does not always effect the series of changes and symptoms which I have been describing. On the contrary, there are cases which run so mild a course that they can scarcely be dignified by the name of fever; besides, there are imperfectly developed cases which show a great diversity in their course, but they all can be included under two heads:

First.—Mild typhoid fever, in which the symptoms are all mild.

Second.—Abortive typhoid fever, in which the duration of the disease is markedly shortened.

In the *mild type*, the fever runs its regular course, but it is of low grade. The temperature rises regularly until its maximum is reached, which rarely exceeds 103° F., then it remains stationary for a time, generally about a week, then a decline follows in the same manner as was noticed in the typical case. This is the regular course of these cases if left to themselves, and, as a rule, they should be left to themselves. Some of these cases are so mild that the patients are not confined to the bed, nor even to their rooms, and perhaps throughout the entire course of the disease are able to transact a certain amount of business. Such cases have been called "walking cases" of typhoid fever.

The eruption appears in these cases early, is of short duration, only a few spots appear; usually there is only one crop. Diarrhœa is also present in most cases of this class, but it is of a mild type, the discharges from the bowels apparently giving relief to the patient. In some cases the diarrhœa alternates with constipation, or constipation may be present throughout the entire course of the disease, and the cases go on exhibiting a varying amount of fever from twenty to thirty days, until gradually convalescence is established. This class of cases, if properly managed, rarely prove fatal; but, if improperly managed, there is great danger. For instance, if a patient walks about while he is suffering from one of these so-called mild attacks of typhoid fever, he does it at great risk to life—in other words, there should be no "walking cases" of typhoid fever. A patient sick with typhoid fever, however mild the type, should take to his bed and remain there until convalescence is fully established, as it is impossible to say just how extensive the changes may be that have occurred in the intestinal track, and in the mildest type of the disease they may be of such a nature that very little physical exertion will cause intestinal perforation, which will be followed by a fatal peritonitis.

The *abortive form of typhoid fever* is ushered in with all the symptoms of a typical case—headache, lassitude, pain in the limbs, nausea, etc., and the temperature during the first week follows the regular variations of the fever. At the onset the disease has every appearance of a severe form of typhoid fever; the temperature may rise as high as 105° F. or 106° F. by the end of the first week; delirium is often active, and diarrhœa is present. By the end of the second week, certainly by its close, the fever is cut short, and abruptly disappears; the temperature falls to the normal standard, and the patient passes on to a state of rapid and complete convalescence. The eruption, diarrhœa, and all the urgent symptoms of the disease may be present, and yet before the end of the second week the patient may have fully convalesced. That it is the typhoid poison which thus acts upon the system, and gives rise to the characteristic symptoms of typhoid fever in these abortive cases, is evidenced by the fact that at the post mortem examinations the characteristic typhoid intestinal lesions are found, and these, taken in connection with the presence during life of the typhoid eruption, establishes the diagnosis beyond question. There can be no doubt but that an individual may be affected, overwhelmed, as it were, by typhoid poison, and yet not develop well-marked typhoid fever. So, if only a moderate amount of typhoid poison is introduced into the system, a mild or an abortive type of fever will be developed. The natural powers of the individual to resist the action of such poisons must always be regarded, and should be taken into consideration, in the treatment of a case.

Differential Diagnosis.—In a typical case, after the fever is fully developed, the diagnosis is not difficult.

The presence of febrile excitement, marked by evening exacerbations and morning remissions, headache, diarrhœa, abdominal tenderness, and other abdominal symptoms, and the presence of the characteristic rose-colored spots, are sufficient for a diagnosis.

In the mild type of the disease, or when the symptoms are developed irregularly, or during the first week of a typical case, the diagnosis is often difficult, and sometimes impossible. The principal diseases which are liable to be confounded with typhoid fever are typhus and relapsing fevers, typho-malarial fever, acute tuberculosis, pyæmia, septicæmia, pneumonia, and gastro-enteritis.

The points of differential diagnosis between typhoid and typhus, relapsing and typho-malarial fevers, will be more apparent and more readily comprehended, after we have studied these different forms of fever. I shall therefore call your attention to their differential diagnosis, after I have given you a history of these fevers.

Acute Tuberculosis.—This disease is attended by very many of the symptoms which are present, and by some supposed to be characteristic of typhoid fever. The fever of acute tuberculosis is of a remittent type, attended by evening exacerbations and morning remissions, delirium, a dry, brown tongue, a tendency to stupor, great prostration, rapid emaciation, and sometimes by a diarrhœa, with abdominal tenderness and tympanitis. All of these are among the prominent symptoms of typhoid fever; consequently these two diseases are frequently mistaken the one for the other. More than once have patients in Bellevue Hospital, with the diagnosis of typhoid fever, presented at the post-mortem examination the characteristic lesions of acute tuberculosis. If, therefore, patients with acute tuberculosis may go through a large general hospital, under the observation of diagnosticians, who certainly are not men of inferior ability, and be supposed to have typhoid fever, there evidently is great danger of a mistake in diagnosis.

The higher range of temperature in acute tuberculosis than in typhoid fever is one of the distinguishing characteristics of the disease. Usually, early in the progress of the disease, it reaches 106° F. or 107° F., while in typhoid fever the temperature rarely reaches 106° F., and almost certainly does not range so high until the end of the second week of the fever, by which time you will have been able to determine the true nature of the disease. Again, you will notice that there is no eruption, neither is there enlargement of the spleen in acute tuberculosis, while both are very constant attendants of typhoid fever; yet their absence is not positive proof that typhoid fever does not exist.

In all doubtful cases you must take into account the family history of the patient, his immediate surroundings, whether typhoid fever is prevailing at the time, and whether the patient has been exposed to typhoid poison. These are important points, and by a careful study of them, if you are able to watch the case throughout its entire course, probably you will arrive at a correct diagnosis before the end is reached. Should you see the case during the first week of the disease, rely upon the presence of the rose-colored spots for a diagnosis of typhoid fever, and you will rarely mistake it for acute tuberculosis.

Pyæmia and Septicæmia.—These diseases, while developing, present many symptoms which resemble those of the developing stage of typhoid fever. In most cases you will be able readily to recognize them, as the surface of the body has a jaundiced hue; there are no lenticular spots, and the febrile symptoms are irregular in their development. There are exacerbations and remissions, but their appearance and disappearance are not marked by any regularity, and usually there is more than one exacerbation and remission in the twenty-four hours. Not only are the variations in temperature irregular, but the temperature reaches a high degree much sooner, and ranges higher throughout its entire course in pyæmia and septicæmia than in typhoid fever. In pyæmia and septicæmia you will also have early in the disease profuse sweatings, great prostration, rapid emaciation, delirium, subsultus, tympanitis, and diarrhœa, while in typhoid fever these do not come on until late in the disease. Besides, the history which precedes and attends the development of pyæmia and septicæmia widely differs from that of typhoid fever.

There is a condition of septic poisoning occasionally met with, resulting from the introduction into the system of septic malaria through the drinking water, which so closely resembles that which is the result of typhoid poisoning, that it is almost impossible to make a differential diagnosis. In these cases the absence of the rose-colored spots is almost the only distinguishing feature.

Pneumonia.—Pneumonia, with typhoid symptoms, is sometimes mistaken for typhoid fever; it is called in your books *typhoid pneumonia*. The differential diagnosis is not difficult if you remember that the pneumonia which complicates typhoid fever does not come on until late in the fever, and you have the regular history of typhoid fever preceding its development. On the other hand, when the typhoid symptoms are present from the beginning of, or come on at the end of the second stage of the pneumonia, the physical signs of the pneumonia will attend or precede the typhoid symptoms. There will be cough and the characteristic pneumonic expectoration; there will be no eruption and no typical variation in temperature.

If you do not see a patient over sixty years of age with this type of pneumonia until the second or third week of its progress although evidences of lung consolidation may be present frequently, it will be very difficult to decide whether the pneumonia is or is not complicating a typhoid fever, and under these circumstances of course the differential diagnosis will be very difficult.

Gastro-enteritis.—In the adult this disease is quite readily distinguished from typhoid fever, as the diarrhœa and vomiting precede the febrile movement; the fever is irregular in its development and progress, and the temperature rarely rises higher than 103° F. In a child between two and six years of age, it is very difficult to distinguish gastro-enteritis, or infantile catarrh, as it is sometimes called, from typhoid fever. The eruption is not so prominent or constant a symptom in the child as in the adult, and with both diseases we have diarrhœa, tympanitis, and typhoid symptoms. These circumstances render many cases of this character difficult of diagnosis. When the entire symptoms precede the fever, and you can have a history of the case, and a thermometrical record from the beginning of the fever, in most cases you can readily make the diagnosis; but if you do not see the case until it has reached the second week of its progress, and you have no accurate or reliable history of its development, a positive diagnosis is impossible.

Trichinous Disease.—Poisoning by trichinæ has frequently been mistaken for typhoid fever. This condition is not unfrequently attended by diarrhœa, vomiting, and the development of other typhoid symptoms; but with poisoning by trichinæ there is almost constantly present muscular pains and œdema

of the eyelids, which will be sufficient to arrest your attention. We have then in poisoning by trichinæ, diarrhœa, vomiting, tympanitis, rapid emaciation, great exhaustion, a brown, dry tongue, high temperature, and other typhoid symptoms; with these you have the œdema of the face, especially of the eyelids, and the most intense muscular pains. By removing a small portion of the muscular tissue and placing it under the microscope, the trichinæ can be seen, and thus you will be enabled to make a positive diagnosis.

Original Communications.

POLYPI AND HYPERTROPHY OF NOSE.

REMOVAL OF POLYPI AND REDUCTION OF SIZE OF NOSE.

By FRANK H. HAMILTON, M.D.,

NEW YORK.

W. G., an Irish girl, about 25 years old, consulted me in Jan., 1876. She said the nose had been filling up and becoming deformed ever since she was a child. Her health was never perfect. On careful examination, both nares were found to be filled with soft polypi resting upon, or originating from a more solid mass, which proved subsequently to be sarcomatous. The gradual development of the polypi had resulted in a remarkable expansion and hypertrophy of the nose. The nose was lifted in the centre;

and upon each side the nasal processes of the superior maxillæ formed large arches, springing apparently almost from the malar bones. The nasal processes were also much increased in breadth, in the direction of, from above, downwards. The orifices of the nares were expanded, and her whole appearance was such that she was unable to obtain employment. The accompanying wood-cut, copied from a photograph taken by the Bellevue Hospital photographer, Mr. —— Mason, gives a faithful representation of her appearance at that date.

Operation, Jan. 13, 1876, before the class of medical students at Bellevue Hospital. The patient being under the influence of ether, and to prevent the blood from entering the larynx, the posterior nares were carefully plugged with tents of sheet lint, to which were attached strings; the strings being brought out of the mouth and committed to an assistant. These strings were designed to facilitate and control the removal of the tents. The polypi were then rapidly removed by evulsion; strong forceps being employed for this purpose. When all had been accomplished which could be, in this direction, and the very profuse hemorrhage had abated, the plugs were removed from the posterior nares; and, with the face of the patient hanging downwards from the side of the table, what remained of the polypi was removed by my forefinger thrust forwards from the posterior nares, and with curved forceps introduced into both the posterior and anterior nares.

Having completed the removal of the polypi, I proceeded to reduce the size of the nose; which was done in the following manner. An incision was made along the anterior margin of the nasal process of the left superior maxilla, extending from the ridge of the nose to the cheek; from each extremity of this incision the knife was carried upwards about one inch; the quadrilateral flap thus laid out, was lifted and the entire nasal process exposed. With the handle of the knife the under surface of the bone was separated from its periosteum; and this was effected with great ease, the attachment of the periosteum to the bone appearing to be very slight. With a bone-cutter the nasal process was then severed at each extremity and removed. In the same manner the hypertrophied process of the right side was removed also. The flaps were returned to their places and the wound closed by delicate silk sutures. Neither of these incisions exposed or penetrated the nasal cavities.

The wounds healed kindly, and the nose soon assumed its present appearance. It is straight and comely, only that it is a little too broad upon its dorsum, owing to the fact that the ossa nasi are rather wide.

The accompanying wood-cut is from a photograph taken a few months after the operation was made.

Nine months after the operation, the polypi had not returned.

The Metrical System has been adopted in Austria, and druggists are required by the Government to conform to it in future.

CEREBRAL EXHAUSTION,

WITH SPECIAL REFERENCE TO ITS GALVANO-BALNEOLOGICAL TREATMENT.

BY GEORGE M. SCHWEIG, M.D.

(Read before the "Medical Journal Association," Oct. 20, 1876.)

Neurasthenia, or "nervous exhaustion," is a very comprehensive term, which may apply to the cerebral, spinal or sympathetic nervous system, or to any or all of these combined. Indeed, although referable primarily to one or other of them, the affection rarely advances far without one or both of the sister-systems becoming involved—a very natural sequence, when we consider their close relations, anatomically as well as physiologically.

I propose in the present paper to limit myself to the form that involves primarily the brain, and which may aptly be termed *cerebral neurasthenia*, or *exhaustion*.

Let us glance briefly at the etiology, pathology and symptomatology of this affection, and we will then be prepared to proceed more intelligently to the discussion of a rational treatment.

Of *causes*, we have the predisposing and the direct. The *chief* predisposing cause may be sought in a mind that lacks stamina, or staying power. As a feeble muscle succumbs readily to continued trying activity, a thus feeble mind, be it otherwise never so clear, or even brilliant, will yield prematurely to long-continued deep thought or hard study. The inherited *neuropathic diathesis* is no doubt an important factor in the genesis of the disease. As may be readily inferred from the nature of their avocations, physicians, lawyers, inventors, etc., furnish proportionately the largest contingent to this class of patients. So far as my own observations go, the disease occurs almost exclusively in the middle-aged, the young and the old being comparatively exempt.

A word in regard to the influence of *sex*. Although occurring almost exclusively in the male, I do not believe that therefore the female is less predisposed to this affection. It seems to me, on the contrary, that this disproportion is owing alone to the circumstance that, in the present order of things throughout the civilized world, man does the hard brain-work, the proportion of females who devote themselves to the learned professions or other pursuits requiring mental exertion, being too inconsiderable to deserve more than passing mention. This, I admit, is of late becoming less so than it formerly was; but I contend also, that when women shall come to furnish a numerically respectable quota to the professions that demand intellectual work, they will then also furnish their proportion, or more than this, of cases of cerebral exhaustion.

The main direct cause of cerebral neurasthenia is simply "abuse of the mental faculties." As is the case with many other organs, the mind can be overfatigued, again and again, until finally prostration, more or less complete and permanent, supervenes. In quite a number of instances, however, we have a *supplementary* cause in collateral influences on the mind, in the shape of depressing emotions and thoughts resulting from family or business troubles, sickness, etc., that render this organ less competent to bear up under taxations that, under ordinary circumstances, it might have sustained with impunity.

With respect to *pathology*, little is to be said. We know that primarily the disease is merely functional; observation, however, teaches that it is frequently the predecessor of so-called "idiopathic cerebral softening." Whether in such instances the cerebral neurasthenia is merely the initiatory symptom of the softening, or the cause of this, is for the present an open question. Theoretically, we may assume that in cerebral exhaustion a foundation for organic changes has been laid by the repeated hyperæmiæ superinduced by the increased afflux of blood which, physiology teaches us, must have accompanied each separate mental strain. In a considerable proportion of the cases, these passing active hyperæmiæ lead to a permanent and more or less intense passive hyperæmia, due directly to oft-repeated over-dilatation of the capillaries.

The absence in cerebral exhaustion of any uniform anatomical change or lesion, compels us to cast our eyes in another direction. Of all theories as to the pathology, none appears to me more likely or reasonable than that of *nutritive changes;* indeed, I can think of no other. The nature of these changes is matter for the future histologist.

Before leaving the subject of pathology, it appears to me appropriate to cite a few words from Professor Erb,* treating of a kindred subject—"Spinal Neurasthenia." Speaking of the nature of that affection, he says: "It appears most natural that we have to do here with *subtile nutritive changes* in the spinal cord, which we are compelled for the present to assume in so many diseases of the nervous system. . . . We possess as yet no knowledge whatever in regard to the nature of the nutritive changes that take place here. . . . The theory that appears to me more reasonable than any other, is that we have to do with an enhancement and fixation of the physiological "fatigue" of the nerve elements, that always follows severe and protracted irritation. In such pathological cases, then, we have only to suppose that this fatigue is not compensated rapidly and promptly, as is the rule under physiological conditions."

The *symptoms* that may follow in the train of cerebral exhaustion are so manifold and varied, that to treat of them in detail would be entirely beyond the limits of the present paper. I shall therefore confine myself to the more prominent and constant of them.

As a rule, the first symptom noticed by the patient is a disinclination for mental labor. If this feeling be for the time overcome, and an attempt made to perform brain work, a comparatively brief application will suffice to exhaust the power of thought, and bring on confusion of ideas. The mind has lost its staying-power. In some cases the memory is enfeebled, in others it remains quite unaffected. To these purely mental symptoms, certain physical ones are soon superadded.

Agrypnia is a very common concomitant from the beginning. Of regional morbid phenomena, those within the sphere of the pneumogastric nerve take precedence, both as to priority and importance, over all others. Among them may be classed: Disturbances of the heart's action, the functions of the stomach, liver, intestinal canal, etc. Vasomotor disturbances are common. Cerebral nerves other than the pneumogastric may in turn become involved. Thus we often have here neuralgiæ of varied form and intensity. At first located in some of the cranial nervous ramifications, these appear frequently within the sphere of the sympathetic and spinal nervous

* Ziemssen, Hand-Book of Special Pathology and Therapeutics; Vo XI., Part II., p. 878.

systems, and may then be classed as secondary phenomena.

I have never observed paralysis, although one patient told me that in the beginning of his trouble, which was some six years before I saw him, he had several attacks of hemiplegia without loss of consciousness, from which he made a spontaneous recovery in less than twenty-four hours. At a later period he had another attack, this time accompanied by loss of consciousness. Paretic conditions, on the other hand, are the rule, although they rarely make their appearance until the disease has existed for some time.

Judging from symptoms pointing in that direction —such as vasomotor disturbances, regional pareses, neuralgiæ or paræsthesiæ, there can be no doubt that both the sympathetic system and spinal cord—especially its upper portion, become functionally involved after a shorter or longer period. From a local cerebral disturbance, if not checked in time, we thus see developed, more or less speedily, a general neurasthenia, with a tendency to organic and perhaps fatal lesions.

This mere glance at the nature and manifestations of cerebral exhaustion and its *sequelæ* is yet, I believe, sufficient to render apparent the necessity of instant and energetic treatment *as early as possible*, when we have still to contend with the primary condition alone. In addition to their aim to relieve the morbid condition itself, our therapeutic efforts become at this time even more important as a prophylactic against organic and perhaps incurable *sequelæ*.

The *diagnosis* of cerebral exhaustion in its first stage should present little difficulty; yet it is precisely here, where its recognition is of most importance, that mistakes in diagnosis most frequently occur. Where the trouble is looked upon as cerebral, the absence of unilateral symptoms, such as hemiparesis or hemiplegia, and other characteristic signs of special organic cerebral lesions will usually suffice to stamp the trouble as functional, and, in conjunction with a just appreciation of the anamnesis and phenomena presented, lead to a recognition of its true nature.

It is not, however, in this direction that diagnostic errors are most frequent. Of the instances of mistaken diagnosis that have come under my notice, nearly all were in the direction of the abdominal viscera. The symptoms due to functional disturbance of the pneumogastric were looked upon as primary conditions. The stomach was often accused, but that scapegoat *par excellence*, the liver, was generally held responsible for everything. The golden opportunity for a rapid and decisive therapy was thus often irretrievably lost, entailing much and prolonged suffering, that might have been obviated by a prompt, correct diagnosis and rational treatment.

In the more advanced stages, even where the neurasthenia has become general, or organic disease developed, the history of the case will, if minutely investigated, almost always throw light on the origin and primordial nature of the trouble.

The *prognosis* depends not only on the severity of the case, the duration of the cause and the hereditary disposition of the patient with respect to nervous disease, but also, and perhaps chiefly, on the patient's ability to lay aside all other considerations, and follow out strictly the course laid out for him by his medical attendant. Where this can be done unqualifiedly, a favorable prognosis is the rule.

We may now proceed to a consideration of the *treatment* of cerebral exhaustion. The one great object of a therapeutic course is patent; it is to seek, by *appropriate* tonization and physiological stimulation, in conjunction with the much-needed rest, to restore to the brain its lost vigor; to correct its impaired nutrition; in short, to bring it back to a normal state.

To effect this, it is of the utmost importance that no time should be wasted with tonic measures that exercise but little if any *immediate* influence on the brain. In view of the important share that prophylaxis bears in the indications for treatment, great circumspection is requisite in order to choose such remedies as are best calculated to insure *speedy* results. I will now proceed to describe the treatment which of all others has rendered me the best services.

The very first condition for treatment, the *sine qua non*, is "rest for the exhausted brain;" not a brief rest of days, nor even weeks, but absolute abstinence from all mental tasks throughout the entire treatment, and until health is perfectly restored. Unless this can be absolutely complied with, other measures are useless, or nearly so. It will be well if at the same time all disagreeable emotions, cares, or harassing thoughts of any kind can be avoided. This, I know, is not always possible, but should be carried out as fully as circumstances will allow.

Of remedial agents, I have found galvanism to surpass in efficiency all others. At a first glance, it would seem as though the objects to be attained by this could be best realized through *direct* galvanization of the brain. This, however, is impracticable. A direct current of sufficient intensity to influence the brain, would prove injurious on the principle that enfeebled organs will not bear *strong* stimulation. Moreover, we cannot with the utmost care prevent the occurrence at times, during galvanization of the brain, of giddiness, ocular flashes, faintness, etc.—all undesirable phenomena, to be avoided in the electrical treatment of functional enfeeblement of the brain. If, on the other hand, we employ a current so feeble that occurrences such as those enumerated become impossible, or at least very remote, and that *strong* stimulation is out of the question, it becomes very questionable, to say the least, whether a current reaches the brain at all; and if yes, it will be too insignificant to accomplish any therapeutic results. My own experience, then, with galvanization of the brain, has long since led me to abandon it in the initial treatment of cases of enfeeblement of that organ.

The manner in which I here seek to affect the brain is by *general* galvanization, administered in its *only perfect form*—the GALVANIC BATH. By its means the brain is made to sustain a reflex or indirect influence from *all* points of the periphery, and at the same time, through derived currents, a mild direct impression, which can be regulated at will, not only by modifying the intensity of the current, but also by establishing more or less perfect communication between the occiput and the water of the bath. This direct influence differs from ordinary cerebral galvanization, whether bipolar or unipolar, in that here no electrode is applied directly to the cranium, which during the entire process is never for a moment in a direct line between the two poles of the battery. It is *never* attended with any of the undesirable phenomena enumerated above as not always avoidable in local galvanization. There are, indeed, no subjective sensations during the bath to indicate that the brain is being acted on at all. Nevertheless, an interruption or reversal of the current will promptly produce the galvanic taste, and, if the current has sufficient tension, ocular flashes, etc., thus establishing beyond doubt the fact that the cranial nerves, *resp.* the brain, participate fully in the gal-

vanic influence. The galvanic bath, then, of appropriate intensity for each individual case and stage, I look upon as the most valuable of all remedies we possess for the treatment of cerebral exhaustion. Bringing, at one and the same time, a suitably modified unipolar direct current and a reflex stimulus from every point of the periphery to bear on the brain, it stands unique among electro-therapeutic procedures. It not only furnishes to the brain tone and the much-needed physiological stimulation that tend to enhance its nutrition, but, through its invigorating influence on this organ, allays the irritability that is so frequent a concomitant of debility, and thus becomes a sedative, and most efficient hypnotic. Its stimulating influence on the vasomotor system, together with its counter-irritant action on the skin, render the galvanic bath a very superior, if not the best equalizer of the circulation that we possess, causing it thus to exercise a further beneficial influence on the suffering brain by unloading its surcharged bloodvessels. In addition to these *direct therapeutic* effects of the galvano-electric bath, this becomes, where the faradic current is added, a means for symptomatic and also prophylactic treatment, more universally applicable and useful than any other single remedy. Of its hypnotic properties, as well as its influence on the circulation, I have already spoken, and in both these respects it does all that can be expected or desired for any agrypnia or vasomotor disturbances that may be present. The well-known anti-neuralgic properties of the galvanic current render it also an efficient corrective for any intercurrent neuralgiæ. The circumstance that in the bath no organ in the body is exempt from the electric influence, is of great importance in the treatment of functional disturbances of the important organs that are innervated by the pneumogastric and sympathetic nerves. Thus, dyspeptic symptoms, hepatic torpor, irregular cardiac action, morbid modifications of the alvine process, etc., are as a rule rapidly ameliorated.

Thus far I have considered the effects of the galvanic current alone. The faradic current, however, may likewise be employed with great advantage, chiefly in the treatment and for the prophylaxis of paretic conditions. Passive muscular contractions of any group or groups of muscles can be obtained in the faradic bath with great nicety, both as to locality and energy of contraction. The importance of this will be readily conceded. Nor is its influence on paresis the sole benefit to be derived from the faradic current. By the very muscular contractions thus evoked, capillary stases are relieved, and a mighty auxiliary is thus furnished the galvanic current in its effects on the circulation.

On the whole, then, the electric bath meets all the indications of the disease but one, viz.: special nourishment for the brain. In addition to an appropriate diet, this may be best supplied by the exhibition of either phosphorus or cod-liver oil, or both, according to indications in individual cases. The phosphorus may be given pure (in pill or solution) or as phosphide of zinc. Where electricity is employed, I consider medicinal stimulants superfluous; nor, with one exception, do I know of any other remedial agents, in addition to those enumerated, from which special benefit might be expected. The exception I allude to is the bromides. These may be advantageously given in cases that are characterized by irritability so intense or cerebral hyperæmia so decided as to indicate the employment of some additional remedy to combat these special conditions.

As for further symptomatic treatment other than that furnished by the electric bath, such may become necessary, and must be determined as occasion arises, according to the best judgment of the practitioner.

A few words as to the mode of administration of the baths in the treatment of cerebral neurasthenia. It is impossible in this respect to lay down any routine formula, either in regard to the duration of the bath, the temperature of the water, or the intensity or direction of the current. Each case has its own laws. A few general suggestions may nevertheless be not out of place.

Very mild currents should be employed in the beginning. As recuperation advances, stronger currents may be gradually introduced. The intensity of the currents should be carefully regulated to keep pace with the gradually increasing capacity of the various organs to respond to the electric stimulus without detriment. Bath currents may be used from the first, although the faradic current is strictly necessary only where paretic or sub-paralytic conditions exist. The galvanic should precede the faradic current, and be employed for not more than ten minutes. Where irritability is a feature of the case, the current should be descending—otherwise ascending. This may be followed by the faradic current, not of sufficient intensity for the first few baths, however, to cause any but *slight* muscular contractions. In most of the cases iron may be advantageously added to the bath. The duration of the baths should at first not exceed fifteen minutes; in some cases this even is too long, the patient complaining of being fatigued perhaps after the lapse of ten minutes. Where this is the case, the bath should be at once terminated. It is, in these cases, not the electric current, but the warm-water bath, that gives rise to the sense of fatigue. Later on in the treatment, the duration of the baths may be from twenty to twenty-five minutes, according to indications.

The practitioner who is familiar with the physiological and therapeutic effects of electricity, will readily grasp the requirements of individual cases; while he who has not given attention to the subject, will either have to abandon the method, or relegate its application to some colleague who possesses the necessary information.

The clinical tableau presented by cerebral exhaustion is so variable, that to introduce here a clinical record of one or two cases only would serve no purpose. As my limits therefore do not admit of the introduction of a sufficient number of cases, I must for the present refrain from a clinical consideration of the subject.

NEW YORK, 160 Second Avenue.

Progress of Medical Science.

A SUBSTITUTE FOR THE COLD BATH IN THE TREATMENT OF FEVERS.—Despite the great success of the treatment of typhoid and other fevers by the cold bath, the possibility of a dangerous nervous shock during its employment, and the difficulty of obtaining the necessary assistants, have hitherto prevented its general adoption in private practice, Dr. Dubois of California now proposes as a substitute for the bath, the running water-bed, which is based on the theory that swiftly running water, or rapidly moving air at the temperature of the body in health will more safely remove excess of heat than still water at a temperature from 20° to 30° below it. A wire-woven mattress is fitted

on a three-quarter camp bedstead, and underneath it, at a distance of a few inches, is hung a shallow tank of rubber, the bottom of which is interrupted in such a way that water let in by a tube at the head of the bed will be forced to zigzag down to the foot, where it will be carried off by another tube. The tank is covered by two closely fitting covers pierced with holes, so that by sliding one over the other, the holes can be closed to any desired extent. The whole arrangement, bedstead and all, can be taken apart and folded up into a bundle six or eight inches in diameter, by three or four feet in length. The best covering for the wire mattress is felt pierced with holes, or a thin hair or wool mattress. When this bed is not obtainable, a few iron tubes connected by rubber tubing, or even a garden hose run up and down a few times under an ordinary bed, would answer on an emergency. These could be connected at one end with a water tank, or faucet, and the waste water conducted to a convenient place from the other end.

The Use of Aromatic Sulphuric Acid in Necrosis.—The Boston *Medical and Surgical Journal*, for August 17th, contains the history of a case of necrosis of the alveolar process, that was cured by daily injection of aromatic sulphuric acid in the proportion of a drachm to the ounce of water, into the substance of the spongy swelling that surrounded the diseased bone. The teeth were very loose, and the case was one that apparently called for operation; but under the above treatment, combined with the use of tonics and an animal diet, the teeth gradually tightened, and in a year the cure was complete.

Easy Method of Removing Adherent Mucus from the Os Uteri.—Prof. Pajot recommends the following as the easiest method of removing the viscid, tenacious mucus, characteristic of certain forms of catarrh, from the uterine orifice. Dip a ball of charpie into the yolk of a fresh, raw egg, apply it for a few seconds to the mucus, and then inject one or two syringefuls of water into the speculum, continuing meanwhile to apply the charpie gently to the cervix. Now let the water flow out, and dry the cervix, when it will be found to be completely cleansed of all secretion.

Homicide by Negligence.—In February last a workman in Algeria, wanting to get a purgative dose of rhubarb, went to a druggist, who gave him instead a large dose of hellebore. A few moments after taking the drug the patient felt very ill, and he died three hours afterwards. The autopsy showed the presence of the intestinal lesions that are excited by hellebore. The druggist insisted that hellebore had been asked for. In consideration of the facts that he did not warn the purchaser of the dangerous character of the drug, and did not place on the packet the double label, red, orange, and black, which indicates that the contained substance is for external use, the court at Nîmes confirmed a previous judgment, by which he was condemned to one month's imprisonment and a fine of 200 francs, for homicide by negligence.

A Simple Method of Treating Umbilical Hernias in Infants.—M. Archambault has for some time past employed with gratifying success the following plan in the treatment of the umbilical hernias of infants. A piece of white wax is softened, and fashioned with the fingers into a ball, which is then cut in two, so as to form two hemispheres. One of these hemispheres, which must be of a size proportionate to the umbilical ring, is applied to it in such a way that its spherical surface securely fills the opening, and is then retained in position by a strip of plaster. Instead of wax we may use gutta-percha, previously softened in warm water. Both of these substances, about two hours after their application, become sufficiently softened to adhere to the skin. If the plaster excite cutaneous erythema, it should be removed every two days, and the skin powdered with rice-powder.—*Le Bordeaux Médical*, September 12th.

Coloration of Wine by Fuchsine.—M. Ritter, of Nancy, recently undertook some experiments on the adulteration of wine with this substance, the results of which must be interesting to wine drinkers. He presented to the *Société Médicale de Nancy* specimens of the different coloring-matters used in the manufacture of adulterated wine, all of which have fuchsine for their base; two cubic centimetres of any of them were sufficient to give a strongly vinous tinge to a quart of fluid. Some of these coloring-matters are strongly arsenical, others are less so, while some contain hardly any arsenic. A man who drank for six days wine colored with arsenical fuchsine, continued for two days afterwards to pass urine which contained arsenic. The importance of this fact, from a medico-legal point of view, will be evident to all. Fuchsine is added to inferior or partially spoiled wines in order to give them the appearance of a superior article; also, to wines to which a large amount of alcohol, and a third, or even half of their volume of water have been added; finally, to wines that have been simply diluted with water, the fuchsine in the last two cases being added principally to mask the presence of water. By M. Ritter's process the presence of fuchsine in the proportion of 1 to 30,060 can be discovered.—*La Tribune Médicale*, September 3d.

Some of the Causes of Goitre.—At the séance of the *Association Française pour l'avancement des Sciences*, on August 23d, M. Nivet, of Clermont, read a paper on this subject, in which he held that medical writers have hitherto laid too much stress on geological influences in the pathogeny of endemic goitre. Magnesian rocks, with or without pyrites, are not by any means constantly found in countries where bronchocele is common. He thinks that, in the department of Puy de Dome, the great atmospheric currents coming from the mountains on the west have an appreciable influence in the etiology of this disease. These currents, however, are but one among many other causative influences. The use of magnesian waters, and living on magnesian soil, create a predisposition, perhaps; as do also bad nourishment, overcrowding, excessive work in the glare of the sun and on land exposed to the west winds, and the ingestion of large quantities of cold water (a cause which has been recognized by many observers). Goitre, beginning as an acute disease under these conditions, attacking for instance immigrants, who, with their families, had been previously free from it, may become chronic and constitutional, and susceptible of hereditary transmission; "and thus acute goitre becomes the nursery of epidemic goitre." Acute bronchocele has been said to consist in a rheumatic affection of the vaso-motor nervous system of the thyroid gland.—*Gazette Hebdom. de Méd. et de Chir.*, September 1st.

Parotiditis.—The inhabitants of the Scilly Isles have been suffering for the past six weeks from an epidemic of mumps. Most of the children have had the disease, and it now attacks the adults. The usual complications are quite prevalent.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, November 4, 1876.

PROFESSIONAL RIGHTS IN THE NAVY.

THE peculiar position of the medical officer of the navy has often been a subject for comment. Although an educated professional gentleman, he is always made to feel himself far below the line officers of his own relative grade. The latter, by usage and regulation, have a certain divine right of rank and privilege, which evidently must not be questioned. A great many arguments have been offered to prove why this should be so, and as the most of them have been founded on technical interpretations of "naval discipline" and "respect to superiors," conclusions were easily reached. Under the circumstances it was hardly possible to suppose that these conclusions were in favor of elevating the ship surgeon either in rank or authority. But the question of naval staff rank has been so fully discussed in these columns that we shall not refer to it in detail. The upshot of the whole struggle for increased rank has practically resulted in an understanding on the part of the officers of the line, that the medical officer has no rights which they are bound to respect.

The surgeons asked for rank for the sole purposes of allowing them the requisite authority to give orders in their own department and to enable them to claim a compensation to which their professional services were entitled.

Every one interested in the question knows what has been the result of the controversy. In the cold comfort of a virtual defeat he was content to fall back upon his professional rights and bury his mortification in the rounds of strictly professional duty. This was the last resource, it is true; but being considered safe from the impertinence of the authority of the line, it was the best that offered. It seems, however, that naval discipline has reached him even there, and that he must resign to his superiors the right of expressing a professional opinion.

It may be within the recollection of some of our readers that a surgeon of the navy was court-martialed and reprimanded for not taking a man from the sick list because he was commanded to do so by a superior officer of the line. It was in vain for the surgeon to give his opinion that the man was unfit for duty, as what is technically called naval discipline must be maintained. The Secretary of the Navy, with an attempt to show a charity to the poor offender, on account of previous good character, publicly declared that "the disobedience complained of in this case was the result of a mistake of judgment in regard to professional rights and duties, rather than of a deliberate intention of wrong" (vid. MED. RECORD, vol. iv., p. 373). His explanation of the reasons of the sentence was only excusable on the score of its ignorance and stupidity. This did not, however, alter its significance as an authoritative precedent for similar cases.

Knowing the facts connected with this case we are not surprised to learn that another surgeon was found guilty of violating naval discipline because he gave it as his professional opinion that the ship, of which he had medical charge, was kept in such a damp condition by a constant wetting of the decks that the convalescence of several cases which he had on board was thereby retarded. The sentence of the court-martial was a public reprimand, and the "laws governing the navy" received an intelligent and noble vindication.

The foregoing remarks may serve to introduce a consideration of the latest case of violation of naval discipline by the unfortunate ship surgeon. The fleet surgeon of the Asiatic squadron, Dr. Turner, soon after joining the flag-ship Tennessee, made several reports to the admiral concerning the bad hygienic condition of the vessel. This impertinence of the surgeon called down upon him the wrath of the admiral, captain, and executive officers, which resulted in a peremptory order that he should cease making hygrometric and other scientific observations. Remonstrance was in vain, and Dr. Turner finally appeals to the Secretary of the Navy for the abrogation of the order. The only encouraging element in this miserable and disgraceful intolerance of professional rights is the manly and spirited protest of Surgeon Turner. It is well that his brethren of the medical staff of the navy have such a valiant champion, and that the profession at large have such a dignified and efficient spokesman. He defines his situation as a medical man so well that we gladly quote the greater portion of his letter:

"The order forbids me to pursue a scientific medical investigation, for it was to determine some of the physical elements under which men, especially seamen, live, that I commenced this study. The examination of such elements is a part of physiology, and more particularly of etiology. This, Mr. Secretary, is my right—the right of my profession. It is axiomatic; does not permit of discussion, because self-evident. It has never been abridged or curtailed. Here and everywhere, from ages past to the present time, the

duty to search for the causes affecting the health and lives of men has been the inviolable right of the physician. The order also suspends the right to the use of my senses. These are beyond military law, and, as I have stated, are my birth-right, inalienable, and not limited by my duties or obligations as a naval medical officer. I again refer to the invasion and arrest of my rights, privileges, and immunities as a citizen. The law of the land guarantees me protection in the peaceful pursuit of my occupation. In this pursuit I have not interfered with the discipline of the service, nor the laws governing the navy. The right to use my private judgment upon all well-decided and scientific facts is ignored. To observe and to experiment, I need not inform you, Mr. Secretary, are the only sources of knowledge and the foundation of science. The right to do so is the endowment of nature to every human being. The order arrests this right."

The appeal has just reached Washington, and is before the Secretary of the Navy. What his decision may be in the light of precedents which he has already established, it is difficult to say. If he had never insulted the profession before through its representatives in the medical staff of the navy, it would be a reflection upon his common sense to doubt for a moment the course he will take.

WATER SUPPLY OF NEW YORK.

The scarcity of water supply in New York has been a subject of very serious complaint. The severe drought of the past summer, and the consequent low level of our reservoirs, continues its effects to such an extent that the Aqueduct Department has been compelled to lower the pressure to one-half during the day, thus cutting off the supply to all but the lower floors of the dwellings. Although New York has been congratulating itself upon its ample reserve against necessities, the fact stares us in the face that we are, in any unusual emergency, apt to overdraw our account. Our city fathers have even been roused from their wonted apathy to the extent of a concern for the future, and have deliberately proposed some improvement upon the present system. The suggestions for extra dams are reasonable enough, except for the small items of time and expense required in their construction; more favor, however, is shown to the expediency of laying extra and independent mains, with independent sources of supply. But, in any event, time and money will be required to effect an improvement. In the meantime, trusting to the chances of copious autumnal rains, the only prospects for the near future suggest the most rigid economy of the Croton.

The present trouble has originated in a great measure from the wilful waste of water by many tenants, and suggests the necessity of some prevention of this waste without causing economical consumers to suffer. The difficulties in this direction are very great. Practically, they have been found to be so far insurmountable as to compel our water authorities to resort to extreme measures.

It is useless to appeal to the good sense of the people at large, so long as the ignorant and unthinking are left free to the dictates of their individual judgment. There should be some means of punishing the actual waste of water by an extra tax. Under the present system this is impossible, as the rate is by no means regulated by the actual amount of water that may be used. The only way to remedy this is to regulate the supply by meter, thus making each consumer pecuniarily responsible. This has been tried with good effect in other cities, and while it does not check the use of water for any useful purpose, it certainly prevents a wilful waste. We may be compelled to adopt this system in the end before we can see our way out of our present trouble. In fact, at present it is the only one which seems to offer any hope.

For the time being, this sudden curtailment of supply threatens to be more than a mere inconvenience. When the water pressure is diminished, some of the water-closets in the upper stories cannot be used, or if used at all, in order to keep the traps full, water has to be carried to them from other parts of the house. It is unnecessary to mention the liability of neglecting these precautions to the escape of sewer gas into the dwellings "even of the best regulated families." The same remarks apply to the traps under the wash-basins. Not long since it was deemed necessary, in view of the danger of dry traps, for the health authorities to officially warn the public against their tolerance. Again, the sewers deprived of the accustomed amount of flushing became the receptacles of stagnant filth, the poisonous fumes of which have been obtrusively manifest at the mouths of the culverts. Is it not time, then, that the authorities should bestow themselves to the full appreciation of the necessities of the hour, and by some rational and prompt remedy not only ward off present evils, but effectually prevent others which may come.

The best we can hope for the present state of affairs is that, by the natural replenishment of our reservoirs, the trouble may not last long; but the liability of similar occurrences in future lends to the whole subject of water supply a seriousness of consideration which has never presented itself before.

The Profession and the Newspapers.—The London *Lancet* is glad to notice the action recently taken by the Kings County (N. Y.) Medical Society in reference to medical advertising, and says: "This is highly creditable to the profession on the other side, and affords an example which might be copied with advantage."

Introductories.—The London medical schools are contemplating the abolishment of introductories, their place being taken by a professional *conversazione*.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, October 5, 1876.

Dr. S. S. Purple, President, in the Chair.

The Academy acknowledged the reception of donations to the library from Drs. Barker, Bell, and Buck, and from the College of Physicians at Philadelphia. Among Dr. Barker's presentations was a valuable work, printed in the year 1550. A resolution authorizing the employment of an assistant librarian gave rise to considerable discussion, but was finally adopted.

THE MALADY OF INNUTRITION.

Dr. George Bayles read a paper upon the above subject, in which he directed attention chiefly to the comparative newness of this elemental cause of suffering on this continent. Poverty was attended by an insufficient food supply, and the present deprivation and suffering was due to the lessening of the streams of pecuniary resources. It was estimated that fifty per centum of the population had suffered pecuniary losses within the last three years, and that at present there were ten per centum who were deprived sufficiently to reduce them to a level with the common herd. The result of such deprivation was believed to be physical degeneracy, and in the wake of that, disease and suffering followed as an inheritance. In the author's experience diphtheria had been largely dependent upon improper food supply; hence food became medicine and proper medicine food in the treatment of such cases. It was his opinion that children at the breast were just as liable as any other class to diphtheria, if they had an improper supply of food, and what was true of diphtheria was believed to be true of many other diseases where blood deterioration was present. Tuberculosis prevailed; nervous disorders were on the increase; uterine irregularities were multiplying; cachexias and eczemas were more and more numerous; acute diseases did not seem to lag, and pneumonia had been excessively prevalent; ephemeral fevers and those of the rheumatic order had also been upon the increase, etc., etc. It was thought hardly just to attribute to lack of proper diet the marked increase in all these diseases, both chronic and acute, but as a positive condition preparing the way its part had been equal in importance, if not greater, than all others. The malady of innutrition, if not suppressed, would prove fatal to all the future. Chronic hunger would jeopardize long life. Those disastrous consequences were to be averted by turning to our advantage the laws of heredity, by establishing upon a firm basis the habits and consonant laws relating to longevity, and by working out a system of communal contentment satisfactory to all, meaning thereby a submission to decently good states and conditions of society. Improper food, irregularly taken and badly digested, was believed to be one of the crying evils of the wealthy classes, and in their case it became a malady and produced correspondingly disastrous effects. The doctor referred to the diet of our boarding-schools, and noted the failure on the part of the scholars to get what was necessary to properly nourish and sustain the body at that period of life.

It was thought that constitutional mischief might follow the observation of Lent as insisted upon in the Romish Church. The malady of innutrition was regarded as an induced condition, therefore a preventable dyscrasia. It was to be prevented by giving to the citizen full knowledge of its evil influence; by establishing numerous centres of food supply, free to all who were in need; by giving a hearty and liberal support to all culinary charities; by the enactment of laws favorable to communal contentment, upon a right basis and in accordance with a right interpretation of the principles which that political condition implied.

Dr. Gouverneur M. Smith observed that perhaps the author of the paper had laid too much stress upon the mere article of food as a cause of innutrition and consequent cause of disease. Certainly we had a most abundant supply of food here. It was improperly prepared without doubt, and in that way might be a cause of disease both in the country and city. But perhaps there were other causes of disease, such as relate to disturbances of the digestive organs, produced by occupation and habits of life, so that the best of food, and served in the best possible manner, could not be properly digested. Others might give way to the demands of fashion to such an extent that the best food, and taken from the best prepared table, could not be appropriated. There were many allied causes which depressed the nervous system and interfered with proper digestion, such as intemperance, etc., etc. It was regarded as necessary to take into account all these accessory conditions in making up a proper estimate of the causes of innutrition.

Dr. E. R. Peaslee remarked with regard to the general proposition, that proper nutrition was of the first importance; and, in regard to food, that that should be placed first and foremost there could be no doubt. Why take food unless to nourish; and why nourish unless to form pure blood, and have that blood circulate to every part of the system, that its elements might be assimilated and form a part of every tissue and organ in the body, so as to repair the waste which had occurred? From that point of view, physiologically, food was of more importance than circulation. It was more important than respiration, for the object of respiration was simply to aerate the blood which is formed from the food. Nutrition was regarded as the question first of all in importance. It was believed to be the first link in the physiological chain—the point of departure; and if there was a failure there, failure followed everywhere as a necessary consequence. Good nutrition should be secured in spite of all obstacles, if possible, for bad nutrition hastened and secured all the malign effects of heredity. Bad nutrition made sure of the development of cancer and phthisis, if the father or mother, or both, had given the person the tendency to those diseases. It became, then, an important question for physicians to consider, for there were thousands in our land who were not able to get a sufficient quantity of food. The physician's knowledge of the evil consequences of improper nutrition should stimulate him to do and say something, in hope that the results alluded to as probable in the future might be averted. The evil influences dependent upon improper nutrition would tell upon the next generation, and that was altogether the saddest part of the picture, if the present time of deprivation was not soon passed by.

Dr. Hanks alluded to the excessively poor diet among the tenement-house population, made up, as it was in most instances, largely of bread and tea. He believed it would be well to have scattered among that class of people a printed circular containing state-

ments endorsed by the medical profession with reference to the best articles of food to be used, in order that the greatest possible amount of nutrition should be secured at the least expense. He farther did not believe that diphtheria was always due to innutrition.

Dr. Leaming alluded to his investigations, made some years ago, with reference to the influence which the so-called "swill-milk" had upon the mortality among the children in his Dispensary department. The mortality had been very great among the children, and it was supposed to be due to the consumption of that kind of food; but upon making diligent inquiry it was found that scarcely any of them had been fed upon milk at all, because the parents were too poor to afford it. The young children had been fed upon such food as the family consumed, whatever that might be. Reference was then made to the marked diminution in the rate of mortality that had been brought about in one of our public institutions for children by the regulation of the diet-list. Under seven or eight years of age the children had been given an abundance of milk and farinaceous food, with picked-up cod-fish occasionally in the summer time. No animal food at all was permitted except the milk. Between eight and fourteen, solid animal food was given three times a week; soup about twice a week, and fruit in its season. The rate of mortality was reduced from five deaths in a year to one in two years, and by subsequent modifications six years had passed with only a single death. It was the doctor's opinion that the kind of food perhaps was of more importance in sustaining proper nutrition than the quantity.

Dr. Joel Foster referred to the general prevalence of the administration of improper food to infants, and said that more good milk was required. It was one of the sayings of John Randolph that Providence had given us an abundance of good food, but that the devil had furnished the cooks.

The Academy then adjourned.

Obstetric Section.

Dr. Isaac E. Taylor, Chairman.

EPITHELIOMA OF THE CERVIX UTERI.

At a stated meeting held at the house of Dr. J. C. Peters, Oct. 16, 1876:

Dr. A. C. Post related the following case. A female patient, æt. forty-seven years, for the last seven months, and after having passed the menopause for several years, had had a recurrence of a uterine flux of blood. At first it appeared at intervals; afterwards it became continuous; the cervix uteri was enlarged and indurated, its cavity widened and occupied by a fungous growth which bled constantly, and increased hemorrhage recurred from the slightest touch. The entire fungous mass was scraped away, the underlying surface brushed over with *a strong solution of iodine (Churchill's tincture)*, and there had not been a particle of hemorrhage since. Dr. Post remarked, that plan of treatment had generally been successful in the treatment of like cases, of which there had been several in the Presbyterian Hospital.

The Chairman remarked that he had come to regard the actual cautery as the best possible means that could be employed for arresting hemorrhage in that class of cases. Scrape away the fungous material, and then brush the surface over with a cautery iron heated scarcely to a red heat—not sufficiently hot to cause any fuming of the tissue. He had used the iodine in several instances, but did not like it nearly so well as the hot iron. He had also employed the strong acetic, nitric, and chromic acids, but had set them all aside for the actual cautery, the iron being only moderately heated. If the cautery should be applied as it ordinarily was, the iron being heated to a white-heat, it would be objectionable, for the more active cauterization, as well as the use of strong acids, was liable to be followed by inflammatory action.

Dr. Mundé inquired if the disease in Dr. Post's case was supposed to be epithelioma of the cervix.

Dr. Post replied that it was so supposed, and that the disease apparently did not extend into the body of the organ.

Dr. Mundé remarked that the application of iodine to the cervix was an uncommon mode of treatment, and that in general the stronger caustics were employed. In the cavity of the uterus he had frequently used the tincture of iodine for the purpose of arresting hemorrhage, either with or without scraping, as the case might seem to demand.

Dr. Mundé inquired of Dr. Taylor regarding the certainty of reaching every portion of the surface with the iron; whether it could be so easily done as with a fluid?

Dr. Taylor replied that with a variety of form of irons every part could be easily reached. Some of the instruments he employed were very small. He further remarked that in those cases where scraping was not necessary, the tincture of iodine might be used with benefit. The disease could be certainly retarded in most cases by the use of these means. It might be necessary to repeat the cautery at the end of a week or ten days, but the hemorrhage seldom showed itself after the first application.

Dr. Joel Foster inquired whether the liquid persulphate of iron was efficient in the treatment of such cases.

The Chairman replied that it did not answer the purpose.

Dr. Mundé referred to a case in which he had scraped away the fungous growth, and then applied an alcoholic solution of bromine, one part to eight. The application was repeated in about two weeks, and no blood had been lost, it then being three and a half months since the last application. He further remarked that there was no better way to check the hemorrhage in these cases than to remove the fungous growth by scraping. The amount of hemorrhage from each procedure was not of much account. He thought that iodine was not a sufficiently strong application.

Dr. Mundé also referred to a case in which chromic acid was used, and extensive sloughing followed, probably caused by the strong acid application. Sloughing of the entire body of the uterus was produced.

Dr. J. C. Peters alluded to a case which the Chairman had seen with him, and in which iodine was used because it was thought not to demand scraping and the use of the cautery. The iodine corrected the fetor entirely, and the applications were not painful. They had been omitted for two or three months, when suddenly profuse hemorrhage made its appearance, but ceased entirely while taking dram doses of the fl. ext. of ergot every two or three hours. After that the local application of iodine was resumed, and the patient had not suffered from either pain, discharge, or hemorrhage during the last four months. The cervix uteri only was involved.

Dr. Wooster recommended the use of the curette, and to follow it with nitrate of silver (porte-caustic),

or a chromic acid solution, two grains to the ounce of water thrown into the cavity, by means of Nott's return syringe, when the body of the uterus was involved. He preferred to use the curette without the aid of a speculum. He first dilated the cervix by means of a laminaria tent, and had thrown a quart of the chromic acid solution into a uterine cavity. The action of the chromic acid was such as to close the opening of the Fallopian tubes, thus preventing any escape of the fluid into the peritoneal cavity. He was very partial to the astringent effect of chromic acid.

Dr. J. C. Peters remarked that the action of strong chromic acid was certainly peculiar as a caustic, for it produced something like a perforating ulcer; that is, its action seemed to be limited, and the inflammation that followed was not usually widespread.

Dr. Hanks remarked with reference to applications to be made to malignant growths affecting the cervix and body of the uterus, and where he did not wish to use the curette, that he had been accustomed to use the strong solution of the perchloride of iron, prepared without alcohol. Its astringent and escharotic properties rendered it much more valuable than the persulphate, and it differed from the ordinary tincture of iron in that it contained no alcohol. In cases of incipient carcinoma of the cervix or of the canal it was believed that, by carefully watching and applying this acid preparation to each little growth as it appeared, the disease could be held in check for a number of months.

DIPHTHERIA.

Dr. Joel Foster referred to several severe cases of diphtheria that had lately fallen under his care, and in which he had been called before depression of the system had become manifest. He had used locally equal parts of liq. ferri persulphatis and glycerine, applied with a camel-hair brush, and it had acted like a charm in destroying the deposit. The application caused scarcely any pain, and in his hands had proved very beneficial. The general treatment had been supporting in the highest sense of the term. When the application was made the membrane turned red almost at once, and came away, and the application was resorted to twice a day so long as the deposit continued to return. In cases where a gargle could be used, chlorate of potash was commonly employed. The doctor felt quite sure that the membrane in his cases was the genuine diphtheritic.

Dr. Hanks thought that the iron and glycerine might destroy the deposit that is found in ulcerative sore throat, but doubted whether it would destroy true leathery diphtheritic membrane. He would not call that kind of deposit diphtheritic which yielded to the local application of persulphate of iron.

Dr. J. C. Peters referred to the fact that Dr. Markoe reported a case of diphtheria in 1844, and that Dr. Sabin also reported a case in the same year. In the year 1845, Dr. Willard Parker reported three or four cases, and in the same year the doctor himself also reported a case. The disease then partly disappeared, and little or nothing was heard of it in this region until the year 1858, when Dr. A. Jacobi was the first to recognize and report its reappearance.

Dr. O'Sullivan referred to the history of a family of children through which diphtheria had passed, and all had made good recoveries under the influence of nutrition, quinine to reduce the temperature, and the local use of a saturated solution of chlorate of potash and glycerine. They began as cases of scarlet-fever, which was contracted in one of the public schools in Long Island City, only a few doors from where they lived. They were all healthy children when attacked, and the doctor believed that the result in any case depended much upon the constitution of the patient present at the beginning of the disease. The mother of those children took care of them almost constantly, was apparently a perfectly healthy woman, was pregnant, and her confinement took place within a few days after the convalescence of the last child sick with diphtheria, when she was delivered of a still born child. The question arose, what caused the death of the fœtus? Was there any relation between the death of the child and the fact that the mother had been caring for her other children, who were sick with diphtheria?

Dr. Mundé remarked that a case of congenital diphtheria had never been known, and that he was inclined to the opinion the death of the fœtus depended upon defective nutrition caused by physical and mental anxiety on the part of the mother.

Dr. O'Sullivan remarked that the child seemed to be well nourished, but that there were evidences of extensive disease of the placenta.

The hour for adjournment having arrived, the Section repaired to the rear room, where, from a table bounteously loaded, fluids and solids good for the constitution and for local application were administered to willing patients.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, October 6, 1876.

Dr. E. G. Loring, President, in the Chair.

A COMPARISON OF THE VARIOUS METHODS OF TREATMENT IN PERTUSSIS.

Dr. P. B. Porter read an interesting paper upon the above subject, in which he stated that in 1872 and 1873 he had published articles in reference to the treatment of whooping-cough by chloral, and at the same time expressed the opinion, based on clinical study, that it was a most efficient remedy in that affection. After giving it a still further and altogether very extensive trial, he had seen no reason to change his views in that respect. He then proceeded to detail a number of cases in which chloral had been employed. As a rule, the treatment was commenced about the end of the first week of the paroxysmal stage, which is the period when the severity of the disease usually occasions alarm on the part of the mother, and induces her to seek medical advice. In all, the effect of the chloral was marked in its immediate influence on the distressing symptoms, and doubtless the duration of the disease would have been still further shortened had the remedy been used with sufficient pertinacity. In some of the cases the whooping entirely ceased in from five to six weeks, in others in about a week, and in others in one or two days.

More recently Dr. Porter had been experimenting with quinine and the fluid extract of *castanea vesca*, and he then gave the history of quite a large number of cases in which those agents had been used. Without assenting to the views of Prof. Binz in regard to the pathology of pertussis, which Dr. Dawson had adopted, he had always strictly observed the rules which the latter had laid down for the administration of quinine in this affection.

In summing up the results obtained, the writer said: "Could I have preserved accurate records of all the cases treated by the three remedies, some definite

conclusions as to the time required for the control of the disease by each agent might doubtless have been arrived at. Still, from those here given some idea can be obtained of their action, and I think it will be found from an analysis of them that in the average number of cases where either of the remedies seems to be of advantage, and is given early, the paroxysmal stage is about three weeks in duration. In comparison with the others, however, I am constrained to say that I have found castanea fail in a much larger proportion of cases than either chloral or quinine. But in those cases in which it is really of benefit to the patient, its action seems quite as efficient as either of the others." After alluding to various other methods of treatment which he had not tried personally, he concluded by relating a case in which he had made use of the plan of a single complete etherization, recommended as a curative measure by Dr. S. D. Powell, of this city. The anæsthetic had no effect whatever on the course or duration of the disease, the patient coughing and whooping just as much after as before its inhalation.

After some discussion, the Association adjourned.

Stated Meeting, Oct. 13, 1876.

Dr. Frank P. Foster, Vice-President, in the Chair.

REPORT ON PULMONARY AFFECTIONS.

Dr. E. Frankel made the report, which was a substantial *résumé* of the important papers upon that class of diseases published during the year 1875. The subject, pneumonia, it seemed, had received considerable attention, and one author had described what he called a *primary asthenic pneumonia*, that was recognized by symptoms of which the more prominent were the following: There were certain prodromata, not differing essentially from those manifest in a large number of diseases; the chill was less constant; there was an imperfect infiltration, with inflammatory products of the portions of lung involved; purulent infiltration an almost constant attendant; gangrene occurred with greater frequency than in any other form; upper lobe attacked by preference; symptoms developed that gave it the name typhoid; albuminuria; enlargement of spleen; jaundice more frequent than in ordinary pneumonia; had been called bilious pneumonia; depended upon a specific poison.

The history of certain cases was quoted, illustrative of the occurrence of pyæmia with pneumonia, and in one case a large number of sores appeared upon the surface of the body, which were believed to depend upon cutaneous embolism.

According to the testimony of some, it was thought that the line between capillary bronchitis and catarrhal pneumonia was too sharply drawn.

From the evidence adduced it would seem that vocal fremitus is a symptom not to be relied upon too strongly in determining whether fluid was present in the pleural cavity.

Upon the data offered one would rather incline to conservatism with reference to the operation of thoracentesis in cases of pleurisy with effusion; puncture perhaps was not so harmless as had been supposed, was the opinion of one author.

It seemed to be substantiated that about one-half of the cases where the effusion was purulent were followed by recovery, after a free incision through the chest-walls, and intermittent washing out of the cavity.

Attention was directed to the report of a case of primary cancer of the lung. The author quoted believed that primary cancer of the lung admitted of no differential diagnosis from pleurisy with effusion.

The opinion had been expressed by some writers that syphilitic bronchitis and chronic pneumonia following, as a general predisposing cause of phthisis, was not so important as supposed. The course of syphilitic phthisis has been said to be slower than other forms. The communicability of phthisis from husband to wife, and from wife to husband, was referred to, and it seemed that the former was more common than the latter, and could be explained upon the ground of infection through the seminal fluid and the fœtus. Those wives who escaped impregnation were more likely to escape the phthisis.

The report closed with a reference to the use of compressed air in the treatment of pulmonary affections. No discussion ensuing, the Association adjourned.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Sept. 27, 1876.

Dr. Charles K. Briddon, President, in the Chair.

The Secretary presented a specimen of spontaneous rupture of the uterus, in behalf of a candidate for admission.

DRY CARIES OF KNEE-JOINT.

Dr. Mason presented a knee-joint, removed by excision from a married woman, aged nineteen years, a patient of Roosevelt Hospital. When seven years of age, the patient said she had a severe attack of illness, which lasted ten months, and at the end of that time she was unable to bear her weight upon her right leg, in consequence of the severe pain which such efforts caused. She was then carried about in her mother's arms for a year, when she began to walk again, the joint remaining considerably stiffened.

Two months before her admission to the hospital, she slipped upon the floor and injured her "weak knee" so severely that she was unable to rest the foot upon the ground. This condition continued until Dr. Mason saw her. She was then very much worn down by pain, was markedly anæmic, and was advanced to the second month of pregnancy. On examination, there was found a subluxation of the knee, outwards and backwards, and the leg was flexed up on the thigh. The joint presented little or no swelling, but the whole limb was atrophied. The joint itself was painful to the touch, and on motion distinct crepitus was elicited. Her general condition improved with great rapidity while in the hospital, so that she was fit for the operation of exsection, which was performed April 14th, by the anterior oval incision. The joint surfaces were almost entirely dry, and presented a beautiful illustration of dry caries. The patella was discovered to be diseased, and was removed with the other portions. The surfaces were brought together by silvered copper wire, the limb placed on a narrow posterior splint, and the whole limb enveloped in plaster-of-Paris dressing. The improvement was astonishing, so that six weeks after the operation the sutures were removed, the wounds had healed, and the union was firm. On the 3d of July the splint was entirely removed, and in August she left the hospital.

Dr. Mason presented a drawing of the limb before the operation, and a photograph of it after the operation. The shortening was found to be somewhat more than an inch, without taking into account that the

right limb was shorter than the left. As far as Dr. Mason had been able to ascertain, this was the second case on record in which the operation had been performed during pregnancy. The first was done by Mr. Gant, of London, and at the same period of gestation.

GELATINOUS SYNOVITIS.

Dr. Mason exhibited photographic representations of a case of gelatinous synovitis of nine months' standing, for which he had also performed exsection. The subject was a single woman, aged 22 years. The operation was done on the 16th of February last, after the same method of the latter case, and with the same kind of dressing. Union was firm at the end of six weeks. April 18th she was up and about on crutches, and on the 28th was out on a pass, and from that time until July, when she left permanently, she was out daily. The shortening was just one inch and a quarter.

In both cases the antiseptic plan of treatment was adopted, the joint being syringed out daily with a solution of salicylic acid, one part to three hundred.

LIPOMA IN A CHILD.

Dr. Frankel presented a fatty tumor, the size of a lemon, which he had removed by operation from the middle and outer third of the clavicular region of a child, aged four years. The operation was performed by the antiseptic plan, under carbolic acid spray. The wound healed by first intention. The patient was not more than ordinarily plump, and there were no signs of fatty accumulation in other parts of its body, neither was there any hereditary predisposition to lipoma present. The point of interest was in the age of the patient.

THE DEVELOPMENT OF CANCER CELLS.

Dr. C. Heitzmann presented microscopic specimens of cancer tumors of the mammary gland and the skin of the parotid region, in order to illustrate the history of development of cancer-elements. This subject has been studied in his laboratory by E. W. Hüber, of this city, and the results published in the Transactions of the Imperial Academy of Sciences in Vienna, vol. lxxii., 1875. The two main views about the formation of epithelial elements, characteristic for cancer, are: that of Virchow, who advocates the development of such elements from the "cells" of connective tissue, while recent investigators, as Thiersch, Waldeyer, and others, maintain that epithelial elements always are the offspring of former epithelium. H. shows that the first formed elements in the embryo are all alike, and the differentiation into peculiar tissues takes place afterwards from those in different elements. Just like in the inflammatory process, even in the growth of tumors; first of all, an indifferent tissue is formed, giving rise to production of distinct forms of connective and epithelial tissues. In cancerous tumors we meet very often with spaces within the connective tissue, closed on all sides and filled with epithelium; no connection whatever can be demonstrated between the newly-formed and the glandular epithelium. The theory of immigration could not explain the gathering of cancer-elements, as epithelium, if ready formed, is not liable to migrate, a property due only to indifferent corpuscles. Then we see in certain forms of cancer groups of epithelial elements separated from each other by elastic fibres, which in normal condition occur only in connective tissue. This is a striking proof for the fact that former connective tissue changed into a cancerous one. The theory of Virchow, therefore, has to be maintained, with the addition that not only the "cells" of connective tissue, but the whole amount of living matter within the basis-substance, is capable of production, and the results of this production can be, under certain conditions, the cancer-elements.

EXSECTION OF ELBOW-JOINT.

Dr. Briddon presented an exsected elbow-joint, and read the following notes of this case, for which he was indebted to Dr. A. F. Buehler, of the House staff, Presbyterian Hospital.

Maggie Shea, æt. 26. Ireland. Married. Housekeeper. Admitted August 26th. She states that the first symptoms of her present trouble began to manifest themselves about a year and a half ago. At that time she was in perfect health, and has no recollection of having received an injury, nor can she assign her present disease to any cause whatever. She then complained of pain whenever she attempted to move her elbow; this pain increased in severity; became excruciating, so as to rob her of her nights' rest. The elbow now began to swell up, and an abscess formed opposite the external condyle of the humerus. After a time patient noticed that her elbow was growing stiff, and that she could move her arm but with difficulty. This stiffness increased so that one year ago she was unable to move her arm at all. She then applied for aid at the Demilt Dispensary, where the abscess was opened, the presence of dead bone detected, and where subsequently a portion of the external condyle was removed by Dr. Satterthwaite. This operation relieved her considerably, so that she was enabled to perform some of the lighter household duties. Gradually, however, the stiffness again returned.

Patient was admitted to the hospital on August 26th. On examination it is found that the elbow is somewhat swollen; that two fistulous tracts traverse the soft tissues covering the external condyle, to terminate at dead bone in the joint, and that marked angular fibrous anchylosis exists, the arm and forearm forming an angle a little less than a right angle, and causing a perfectly useless joint. Patient also complains of pain occurring at intervals of days, and which is most severe at night.

August 31st.—It had been decided to operate upon the patient to-day, but as she was suffering from intercurrent attacks of inflammation, in which the joint puffed up, attended by the formation of abscesses and elevation of temperature, it was thought advisable to postpone the operation until September 7th. Poultices have been applied to hasten suppuration.

September 5th.—Patient this morning has had a slight attack of inflammation and severe pain in the joint. She was ordered tinct. aconit., gtt. ½, every two hours. Her evening temperature was 100°.

September 6th.—Patient's temperature normal. Poultices were discontinued this evening.

September 7th.—Operation by Dr. Briddon.—Patient being placed under ether, a free vertical incision was made, being about four inches in extent, taking for its centre the olecran process, and dividing the soft tissues down to the bone. The soft parts were then carefully separated from the bones, and the dissection was then carried around the olecranon, closely hugging the sides of this process, so as to avoid the ulnar nerve. The articular ends of the bones were then turned out of the joint. It was then found that all the bones entering the elbow-joint had undergone carious action. The head of the radius and sigmoid cavity were then removed by means of a chain-saw, care being taken to avoid the insertion of the brachialis, anticus, and bi-

ceps muscles; the condyloid surface of the humerus, being diseased, was removed in the same way. After arresting the hemorrhage the incision was then closed, with the exception of a space of about one-half inch in the middle, into which a tent of lint, saturated with carbolized oil, was introduced, so as to leave an opening through which drainage might be established. The arm was then placed upon an angular splint, to secure absolute rest. Patient very readily recovered from the effects of ether and operation. In the evening she complained of severe pain at the elbow, which was relieved by hypodermics of morphine. Cold-water dressings have been applied to the joint. Evening temperature, 100.5°.

September 8th.—Patient is doing very well, but is annoyed by a sense of numbness in her fingers, which is attributed to the application of the Esmarch bandage. The swelling around the joint is inconsiderable. Temperature in the morning, 99.8°. Evening, 102.2°.

September 10th.—This morning a portion of the tent which had loosened, together with most of the sutures, were removed. Morning temp., 100.8°. Evening temp , 100°.

September 11th.—The remaining portions of the tent and of sutures being removed, a free discharge of pus followed. A new plug of vascum was introduced, and it was ordered to have the wound syringed out twice a day with a weak solution of carbolic acid (3 j.—Oj.). Morning temp., 99°. Evening temp., 99.20°.

September 13th.—The joint to-day looks very well; there is very little swelling, and discharges freely. The numbness in fingers is diminishing. Morning temp., 98.8°. Evening temp., 99°.

September 18th.—Since September 13th the patient's condition has been steadily improving, the swelling has subsided, and the temperature has not gone beyond 101°.

September 24th.—The temperature to-day rose up to 102°, and a small abscess formed around the outer part of the joint, which was opened. Since then patient is doing well.

Dr. Satterthwaite remarked that the patient presented herself to the college clinic two years ago, with what appeared to be simple caries of the external condyle. Iodine applications were made to the part and specific treatment employed with good result. At the end of six months after the supposed cure the disease returned, when she presented herself at the Demilt Dispensary, when the same treatment was continued with benefit. An operation was advised, but, being advanced in pregnancy, the patient declined its performance. After the birth of the child she presented herself again for treatment, when the disease was found to involve the joint, and she was sent to the hospital.

Dr. Briddon supposed that the origin of the disease was in caries of the condyle, and that the joint became subsequently perforated.

Dr. Mason remarked that, especially in gelatinous degeneration of the joints, it was very difficult, and oftentimes impossible, to get crepitus. He then related a case in point of disease of the tarsal joints, in which no such crepitus could be discovered; but at the operation the whole of the three cuneiform bones and a portion of the cuboid were destroyed.

(To be continued.)

Frederic William Godon, M.D., late of this city, died at San Rafael, Sept. 23, after a brief illness. Deceased was a native of Philadelphia, and a graduate of Harvard and Bellevue Hospital Medical College.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from October 22 to October 28, 1876.

McClellan, Ely, Surgeon. To proceed to Columbia, S. C., and report in person to the Department Commander. S. O. 152, Dept. of the South, Oct. 19, 1876.

Forwood, W. H., Surgeon. To report in person to the Commanding Officer, Dept. of the South, for assignment. S. O. 219, A. G. O., Oct. 21, 1876.

Hall, J. D., Asst. Surgeon. To accompany battalion of 1st and 3d Artillery to Columbia, S. C. S. O. 206, C. S., Mil. Div. of the Atlantic; and assigned to temporary duty at Columbia, S. C. S. O. 156, Dept. of the South, Oct. 24, 1876.

Ewen, C., Asst. Surgeon. To accompany battalion of 3d Artillery to Columbia, S. C. S. O. 206, Mil. Div. of the Atlantic, Oct. 18, 1876; and assigned to duty at Aiken, S. C. S. O. 155, Dept. of the South, Oct. 23, 1876.

Ainsworth, F. C., Asst. Surgeon. So much of S. O. 182, C. S., from A. G. O., as accepts his resignation to take effect Nov. 10, 1876, is revoked. S. O. 219, S. C., A. G. O.

Buell, J. W., Asst. Surgeon. To accompany Co. "A," Permanent Party from Columbus Barracks, Ohio, to Columbia, S. C., S. O. 155, Fort Columbus, N. Y. H., Oct. 19, 1876, and assigned to duty at Blackville, S. C. S. O. 155, C. S., Dept. of the South.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending October 28, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Oct. 21	2	14	23	1	3	46	1
Oct. 28.....	0	11	28	1	19	39	1

Warts.—Chromic acid is probably the best local application for warts.

Wakefulness.—Dr. John L. Cook, of Henderson, Ky. (*Louisville Medical News*), proposes a remedy for lowering the pulsations of the heart in insomnia by taking deep and slow inspirations. We suppose these should be continued until the patient gets asleep.

Bromide of Potassium disguised in Milk.—It is claimed by a writer in the *Medical Times*, that one ounce of milk will disguise the taste of twenty grains of bromide of potassium, and will effectually prevent the disagreeable sensation of burning in the stomach experienced by patients after taking the dose.

Doctors in the French Army.—The French Minister of War has decided that physicians and pharmacists provided with diplomas, and the interns of the large hospitals, who may be liable to service in the reserve, will only be required to serve in their professional characters, and not as simple soldiers. Those who cannot be utilized professionally will be allowed to remain at home.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, November 11, 1876.

MEDICAL WOMEN.

THE King and Queen's College of Physicians of Dublin has at length determined to admit a woman to its privileges of license. Although this fact startles some of our English brethren, we believe that the college has not taken a very dangerous departure. We see no reason why it should not, like medical institutions in this and other countries, share the responsibility of solving a vexatious question. It is useless to rail against the women studying medicine. They will do it in spite of male opposition, and have a right at least to try.

They believe they have a sphere in medicine, and we should rather help than hinder them in finding it. Whether they are specially fitted for medical work is not now the question, but whether we will give them an opportunity to work out their own salvation. If we persist in persecuting them, we must only wait the longer for the problem to be solved. The *Lancet* says: "We believe woman's work is to console and support man, not to usurp his functions." This view is eminently sound, and as a general rule is admitted by all. But all general rules have their exceptions, and it is with these exceptions that we mainly have to deal. It is useless for the *Lancet* to say that "unwomanly women alone can aspire to unwomanly work," for it has no effect. The women view the question from an altogether different stand-point, and are willing to shoulder all the opprobrium of the new situation. It is entirely gratuitous for us to bewail their sacrifice of the tender qualities which we call lovable and womanly; if such be sacrificed, what real responsibility have we in the matter? The simple fact narrows itself down to this: some women believe that they are specially qualified to study medicine, and as a profession we believe to the contrary. Neither party can be satisfied until a fair trial is allowed. The right for a trial no one must deny, and the college in question does no more than grant it. The English profession will not be ruined by the course adopted, neither will any extraordinary number of women avail themselves of the advantages offered.

In New York we met the issue long ago, and would have settled the question if we were not forced to acknowledge that "one swallow does not make a summer." It is true that we have a very fine specimen of a swallow, but the summer is not yet.

THE IMPROVEMENT OF IDIOTS.

THE improvement of the condition of idiots and feeble-minded children invests itself with a special interest in connection with the formation of an Association for that purpose, and composed of gentlemen who have already devoted the greater portions of their lives to its study.

The very organization of such an Association promises the best of results by the intelligent centralization of ideas and purposes. A great deal of very valuable information concerning the unfortunate class of children is scattered in the case-books of physicians all over the land, and it is time that it should be turned into the channel where it can do the most good. We are happy to say that the Association so far appreciate the value of such information, that it has made an appeal to the profession at large for every fact of observation or experience which may tend to throw any light upon the general subjects of causation and treatment.

The circular to which we refer is merely a general solicitation for information, leaving the particulars which each gentleman may care to contribute to his individual discretion. The gentleman to whom these answers should be addressed is J. Kerlin, M.D., Secretary of the Association, and Superintendent of the Institution for Idiots, Media, Penn. We hope that our readers will do all in their power to help along the good work and give it the substantial encouragement which it deserves.

It should be a matter of special congratulation that the gentlemen composing this Association are acknowledged experts, and are abundantly able, as well as willing, to utilize all the new facts which may be placed at their disposal. In fact, at the very commencement of its labors we are warranted in predicting for it more than ordinary success. It must soon be looked upon as an authoritative body, not only by the profession, but by the people at large, and its opinions must be respected accordingly. The individual members have already done much to improve the condition of the idiot by judicious physiological training, and have succeeded, even through these weak vessels, of proving the great differences between practical and theoretical education. None, however, are more painfully aware of the necessity of even greater improvement; and, appreciating such a necessity to its fullest

extent, they ask their medical brethren to come up and help them.

MEDICAL SUPERVISION IN SCHOOLS.

The Boston Board of Education has appointed a committee to report upon the advisability of a medical inspector of schools. If this committee wish to reflect the sentiment of the medical profession and of an enlightened public, there is but one result to be anticipated. We imagine, however, that there is to be no difficulty in using the proper arguments at the proper time and in speedily initiating the desired reform. In the meantime our own Board of Education is stupidly stubborn on this vital question. But the time is not far distant when what may now be a matter of choice, may be changed into one of compulsion.

THE OUTSIDE ESTIMATE OF AMERICAN MEDICINE.

Our English cousins who honored us with their presence at the Medical Congress are well pleased with the treatment they received. Their comments upon the success of the undertaking are frank and generous, leaving no doubt of the most cordial appreciation of our endeavors to make their visit agreeable and profitable. The English journals without exception speak of the Congress as a great success, and congratulate the managers accordingly.

The foreign delegates are at the same time willing to acknowledge that American surgery and American medicine are as progressive as are the same departments in their respective countries.

Our skill in operation and ingenuity in contrivance are matters of cheerful acknowledgment on the part of our foreign visitors, and it should be our highest aim to continue to deserve our good reputation. Our institutions, medical museums and medical libraries have received their full share of encomiums. Mr. Adams, delegate from the Medical Society of London, lays his brethren on this side of the Atlantic under particular obligations for the handsome manner in which he has referred to doings in and out of the Congress. On his return to London, and on the occasion of his resuming the chairmanship of the Society after his vacation, he occupied the whole session with an account of his visit to America, and of his appreciation of American talent and American enterprise. His nomination of four distinguished American medical men to the honor of corresponding fellowship was very judiciously and worthily made, and reflects a compliment upon the entire profession of this country.

The Colleges in New York are well patronized. Each institution claims to be doing better than last year. The clinics at the hospitals are well attended. The professors appropriate evenings in the week for quizzing the classes, and are more than ordinarily anxious to give the students every opportunity for improvement.

Progress of Medical Science.

Treatment of Typhoid Fever by Ergot.—At the meeting of the *Association Française pour l'avancement des Sciences*, of August 23d, M. Dubouć, of Pau, stated that he had treated a number of cases of typhoid fever with ergot, and that his success has been satisfactory. The toleration of ergot increases with the severity of the disease. As a rule the drug is not so well tolerated by women as by men; consequently, it must be given in smaller doses to the former. It may be given without fear to pregnant women. The pulverized ergot of rye preserves all its medicinal qualities for about eight days; if it lose its physiological properties within that time, it is because it was already altered when pulverized. Of fifteen cases treated by Dr. Dubouć, the extreme rapidity of the cure rendered the diagnosis of two uncertain; five cases of moderate gravity that recovered presented during their courses alternations of aggravation and amelioration that corresponded with intentional interruptions of the treatment. Of eight very grave cases, six recovered; three of these cases being already far advanced before the ergot treatment was begun. In the two fatal cases the ergot did not produce its ordinary therapeutic effects, and on examination it was found to be worm-eaten and covered with a grayish powder.—*Gazette Hebdom. de Méd. et de Chir.*, September 1st.

Diabetes a Cause of Phymosis.—M. Bourgade has observed four cases of phymosis due to the irritating action of the saccharine urine of diabetes upon the meatus, the gland, and the prepuce. That saccharine fluids are irritating is proven by the frequency of papular and vesicular eruptions on those parts of the body that are usually uncovered among workmen in sugar factories. Surgical operations for the relief of the phymosis in these cases are useless as long as the cause persists. The first indication is to remove the cause, and when this is done the phymosis will often disappear spontaneously. M. Bourgade thinks that a phymosis complicated with a balano-posthitis should never be operated on before the urine has been examined for sugar. M. Verneuil has also seen two cases of diabetic phymosis, and agrees with M. Bourgade as to the inadvisability of operating. A confrère of his had lost two cases on which he imprudently operated for diabetic phymosis.

We may add here that M. Comillon, of Vichy, reports three cases of diabetes complicated with inveterate fistulas and large ulcers, which had existed for a very long time, in which the local affections disappeared in a few days under the influence of the alkaline treatment. The diabetes was ameliorated, and the improvement immediately extended to the local affections. Cicatrization took place in one case in three days, in another in five days, and in the third in eight days. M. Comillon thinks that the diabetic ulcers should be considered a distinct variety, as well as the varicose and the tuberculous ulcers.—*Le Progrès Médical*, September 2d.

Lesion of the Cerebellum and Diabetes Mellitus.—In a fatal case of diabetes mellitus, which was treated in Mosler's clinic, and in which there had been no disturbances of sensation, or motion, or of the special senses during life, the autopsy revealed a well-marked spot of inflammatory softening about the size of a pigeon's egg, in the nucleus dentatus of the left hemisphere of the cerebellum. The theory of the

neuropathic origin of diabetes rests on sound practical grounds, and there can be little reason for doubting that in this case the increased secretion of sugar was excited by the central affection, especially as Eckhard has shown that injury of the second lobe of the vermis cerebelli in rabbits will artificially excite diabetes. It is strange that such a well-marked lesion was not attended by any signs of disease of the central nervous system during life.—*Berliner klin. Wochenschrift*, July 10, 1876.

Corrosive Sublimate as a Remedy for Gonorrhœa.—During the last three years, Dr. Leopold Brück, of Buda-Pesth, has given the bichloride of mercury a systematic trial in the treatment of blennorrhœa urethræ, and the following are the results of his experience:

1. Under the use of the sublimate, gonorrhœa is cured within six weeks, without the supervention of any of those complications that are met with when the treatment by injections is employed. The use of the remedy may be begun in the so-called hyperæmic stage. The discharge is very profuse during the first ten days, and then gradually becomes less profuse and more serous; the burning pain and the chordee are not severe.

2. Spirits, coffee, and highly spiced foods must be avoided during the treatment.

3. Purgatives are not required while the sublimate is being used.

4. The remedy sometimes causes cramps in the stomach and small intestine, and its use must then be intermitted for some days.

5. It must not be used when there is disease of the heart or lungs.

The sublimate should be given in pill form. During the first 10 days, 20 pills, containing each $\frac{1}{12}$ gr. of mercury should be given; the next 20 pills should contain $\frac{1}{10}$ gr. of the medicine, or they should be taken in half the time if the quantity remain the same.—*Centralblatt für Med. Wissenschaften*, July 1, 1876.

Bicarbonate of Soda in Suppression of Urine.—Dr. Dickinson, in his lectures on albuminuria, says, that "in that rapidly fatal form of nephritis, in which the tubes become widely sealed up as if with molten glass by a pseudo-croupous exudation of fibrin, while the urine is loaded not only microscopically, but as a bulky precipitate, with large fibrinous cylinders, all plugging from this cause can be prevented by alkalies." Mr. Semon Lane, of Dunfermline, states, in this connection, that he has used the bicarbonate of soda in a great many cases of renal disease with success, and reports a few cases of suppression of urine to illustrate its good effects. In the first case, the patient, a previously healthy strong man, was suffering from acute nephritis. His face and extremities were œdematous; he complained of pain in the back, and a constant desire to urinate; his urine was very scanty, about four ounces being passed in the twenty-four hours, acid, loaded with albumen, and contained casts, renal epithelium, and blood. Half a teaspoonful of bicarbonate of soda was given three times a day, along with a diaphoretic and a warm bath every night, and in five days the urine was normal in quantity, alkaline, quite clear, and without a trace of albumen. In the second case, the patient, who had suffered for three years from profuse suppuration due to caries of the spine, passed only six to eight ounces of acid, highly albuminous urine in the twenty-four hours. He had general anasarca and œdema of the lungs. Half a teaspoonful of bicarbonate of soda was given thrice daily, and in three days his urine had increased very greatly in quantity, was alkaline and free of albumen, while the œdema had greatly diminished. A third case was one of general anasarca, after scarlatina in a child three years old. His urine was highly albuminous, bloody and scanty; his temperature was 103°, and he complained of pain in the back and great nausea. He took one-fourth of a teaspoonful of bicarbonate of soda, three times a day, and was bathed every night. In exactly a week he was quite well, though feeble and anæmic.—*British Medical Journal*, July 15th.

The Arthropathies of Locomotor Ataxia.—M. Raymond has examined a number of joints and bones that became diseased in the course of this affection, and directs attention to the process of atrophy and destruction that affects principally the most projecting parts. This atrophy is not accompanied by osteophytic deposits as is *e. g.* ordinary arthritis deformans, and the individual parts in the latter affection do not so completely lose their normal forms as they do in the ataxic disease. In this the ligaments, as such, disappear, and in their place a dense connective tissue is developed; the muscles in direct opposition with the bones are atrophied, and have undergone fibrous or fatty degeneration. The fluid contents of one of the diseased joints consisted of a reddish serum that contained a few red and white blood-corpuscles and hæmatoidin crystals. Muriatic acid and heat showed that it contained large quantities of albumen.—*Centralblatt für Med. Wissensch.*, September 16th.

Clinical Study of Diphtheria.—At the late session of the *N. Y. State Medical Society*, Dr. Bayles, of this city, read a paper on the above subject, in which he endeavored to prove that diphtheria is primarily a constitutional disease, and that it is in all probability autochthonous and not excited by a specific germ poison. His observations were based on twenty cases of the disease met with in dispensary practice. In all these cases he found that there had been a deterioration of the health and strength for a varying period before the appearance of the disease, and after the commencement of the disease, all, with perhaps one exception, were seen before the appearance of membrane in the throat, and many even before the appearance of the catarrhal throat symptoms. The symptoms these cases presented, were, quick, irritable pulse, high temperature, cool extremities without moisture of skin, pallor, rather slow respiration, nausea, and sometimes vomiting, diarrhœa, somnolency, irritable temper, and scanty urine of high specific gravity and loaded with urates. In each of these cases the doctor made a slight abrasion of the cutaneous surface at some distance from the usual seat of local lesion, and in every case after a short interval a membranous patch covered the surface of the wound. In one case this was done to verify the diagnosis after the throat lesions had appeared, but in all the others the traumatic exudative patches preceded or appeared simultaneously with the faucial patches or the nasal flux. The appearance of those patches on the body is a certain diagnostic sign of diphtheria, and the fact that they preceded the formation of faucial patches in some cases, demonstrates beyond question the primarily constitutional nature of the disease.

With regard to the etiology of the disease, Dr. Bayles is convinced by his observations that the disease is autochthonous, and neither depends upon nor is propagated by a specific contagion received from without. A predisposing cause is to be found in the noxious influence of bad air, bad food, and uncleanliness, acting on an already impaired and badly sustained system. The fact that many persons in a family often suffer in

turn from the disease does not militate against this theory, for all the members of the family are generally exposed to the same noxious influences. The infrequency, not contiguity, and slow multiplication of Dr. Bayles' cases, excluded the idea of an epidemic, and in no case could he, on the closest scrutiny, find one sufficient local cause for the disease.

All of Dr. Bayles' cases recovered, a result which he seems inclined to attribute to the early and active constitutional treatment to which they were subjected. As soon as the diagnosis was made, he gave a single dose of from ten to thirty grains of calomel as a sedative and alterative. The dose for infants was smaller. Two hours after this he gave a powder containing one grain of quinine and three grains of Dover's powder, and repeated it every hour until free diaphoresis was produced, and then at intervals of two or three hours, for twelve hours longer. This was to supplement the action of the calomel, and, at the same time, support. He then gave the elixir iodo-bromide calcium compound, in doses of a teaspoonful every two or three hours until convalescence was established. This medicine he considers as a valuable general tonic and alterative. When possible, he used the same medicine mixed with water as a spray or gargle, but employed no other local treatment. Milk was the chief food allowed, with the addition of a little brandy from the third day. Lastly, the body was bathed two or three times a day with a tepid lotion of salicylic acid, partly as a concession to the disinfectionists.—*Virginia Medical Monthly*, September.

The Originator of the Double-curved Midwifery Forceps.—With the exception of Johanne Mulder, all the prominent English, American, and Continental writers on the history of the forceps, give the credit of adding the pelvic curve to Levret or Smellie. Dr. McClintock, however, at a recent meeting of the *Dublin Obstetrical Society*, proved that the merit of this change in the construction of the forceps really belongs to Dr. Benjamin Pugh, of Chelmsford, England. Levret indicated in a work published in 1747 that he had given a new curve to the forceps, but he did not publish a description of his improvement until 1751. Smellie was led to give his forceps the pelvic curve, by his experience in a case that occurred in 1752. Dr. Pugh, however, in a book published in 1754, but evidently written four years earlier, gave descriptions of long and short double-curved forceps that he had invented upwards of fourteen years before. This carries us back to the year 1736 as the date of Pugh's invention. It is evident, then, that, although both Levret and Smellie probably thought their inventions original, the credit for the priority of the invention really belongs to Dr. Pugh.

The Nerve Terminations in the Electrical Apparatus of the Torpedo.—In this paper M. Rouget combats the statements of Ranvier, that the electric nerves in the torpedo terminate in the electrical apparatus exclusively by free ends, and never in a closed network (Kölliker, M. Schultze). M. Rouget recommends the use of a seven per cent. solution of nitrate of silver on the fresh tissue, as a sure method of demonstrating the constant occurrence of a closed network. Remak is cited by Ranvier as an authority for the free ending of the electric nerves, but Rouget believes that at the time Remak made his observations (fifteen years ago) the optical and technical aids at the command of the observer were not sufficiently powerful to decide this question. The somewhat confused statements in Remak's text is a proof of this.—*Centralblatt für Med. Wissen.*, September 16th.

Reviews and Notices of Books.

Autumnal Catarrh (Hay-Fever), with illustrative maps. By Morrill Wyman, M. D., late Hersey Professor Adjunct of the Theory and Practice of Medicine in Harvard University, etc., etc. New York: Published by Hurd & Houghton. Cambridge: The Riverside Press. 1876

Hay-Fever; or, Summer Catarrh: Its Nature and Treatment. By George M. Beard, A.M., M.D., Fellow of the New York Academy of Medicine; Member of the New York and Kings County Medical Societies; of the New York Society of Neurology, etc., etc., etc. New York: Harper & Brothers, Publishers, Franklin Square. 1876.

Dr. Wyman was one of the earliest investigators of this disease. Perhaps he was stimulated to such investigation because the disease was one of his annual visitors. At all events, something more than twenty-five years ago he gave a description of what he calls autumnal catarrh, and from that time until the present he has been a steady and acute observer of its phenomena, as witnessed by the contributions which from time to time he has given to the profession regarding its natural history. The present volume is brought forward as one containing the result of these many years of careful study and observation. "There are two forms of catarrh," says Dr. Wyman, "and both recur annually. One is known as 'rose cold,' or 'June cold,' 'hay asthma,' 'hay-fever,' etc., and commences in the last week of May or first of June, and continues until about the first week in July. The other is known as autumnal catarrh, because it occurs in autumn. The most prominent features of distinction between these forms of catarrh are two in number, namely, time of occurrence and severity of symptoms. The 'June cold' is a mild disease, and depends upon new-mown hay as the well-marked typical cause. The autumnal catarrh is more severe, cough and asthma being prominent symptoms, and its essential cause is not known. It is to the latter form of the disease that the author directs our attention in the book before us. After the introduction, a general description, or history, of the disease is given, in which the symptoms are enumerated in their order and the principal variations noted. We incline to regard this as a commendable feature of the book. In the sections following an account is given of the local symptoms; such as those relating to the nose, eyes, mouth, and throat, chest, asthma, heart, and skin. Then follows a description of the constitutional symptoms, such as fever, intermittent character of the catarrh, and *impression upon the nervous system*. Associated with this is a tabular comparison of groups of symptoms with reference to their frequency of occurrence; and it is seen that there is a preponderance of the affection of the eyes, nose, ears, and throat, over the other groups. Upon these pages—and it is another commendable feature of the entire book—clinical foot-notes are added, illustrative of each symptom described in the text. It amounts to demonstrative teaching, which is always convincing.

Succeeding these are several sections devoted to the study of the annual course of the disease. Here we find the three stages of the affection described, namely, the *catarrhal*, the *bronchial*, and the *spasmodic*. The author recognizes the existence of premonitory symptoms, but does not deem it necessary to introduce what other authors have called a *premonitory* stage. The

author then presents what he is pleased to call the "geographic and chorographic relations" of the disease, and these sections are accompanied by maps upon which are indicated the regions in the U. S. where the disease prevails, as well as those in which the sufferer is comparatively, if not entirely, exempt. These pages afford evidence of extended and prolonged research. The probable correctness of such chorographical indications is distinctly recognized by Dr. Wyman, and, in one place, he speaks of the probable exemption from catarrh at Peterboro, Madison Co., N. Y., situated upon the great Pennsylvania and Ohio plateau. On a still higher elevation, upon the same plateau, and a few miles from Peterboro, cases of "June cold" have occurred, however, and one which the reviewer calls to mind was cured entirely by removal to Cedar Falls, Iowa. Now, by referring to Dr. Wyman's maps, it can be seen that Cedar Falls is situated upon the border line between the catarrhal and non-catarrhal regions; but whether our old friend is just over the border and looking disparagingly towards the east, we are unable to say, but suppose that she may be. The maps, however, were made for study with reference to autumnal catarrh, and the reason for introducing this case of June cold will be seen hereafter. In general, place has a marked influence on the disease, and the mountains and the sea are resorts where the sufferer can escape the torments of this annual visitor. Elevation, however, is not the only element of prevention. Some patients are very much benefited by resorting to large cities during the months when vegetable pollen is most abundant, a fact that argues somewhat in favor of the disease being of vegetable origin. Under the head of "cause," Dr. Wyman has first presented what is known regarding the essential nature of the disease, and concludes by rejecting hay as a cause, and states that the essential cause is not known. He believes, however, that the disease is hereditary, and under the head of individual predisposition he almost says that it should be regarded as essentially of *nervous* origin. For, on making inquiry as to the system or systems in which this predisposition may lie, the author says: "'The speedy disappearance of all these symptoms,' and 'the suddenness of the attack' without the usual signs of inflammation, certainly correspond better with what we know of derangements of the nervous system than with those of the mucous membrane or the organs by which it is invested." The author admits the unquestionable subsequent implication of the mucous membrane, and that the tissue may become "temporarily hypertrophied or even permanently thickened." Several pages are devoted to the sensitive nervous system under the head of causes. First admitting that there is a peculiar individual predisposition, Dr. Wyman believes no advance has been made as to the cause of the outbreak at certain seasons of the year and no other. The exciting causes, or what the author calls "causes of paroxysms," such as dust and railway smoke, never develop the peculiar symptoms except during the critical period. The suggested relations which heat, strong sunlight, and electricity have to autumnal catarrh as causes, are then discussed, and the conclusion reached that of the origin of this singular disease but little is known. Under the head of causes of paroxysms, the evidence in favor of vegetable and animal origin is considered, as well as dust, heat, bright sunshine, fruits, fragrance of flowers, etc., etc. In this connection three interesting questions are asked: Is it a self-limited disease? Is it a new disease? Is it connected with civilization? It is believed to be self-limited only when not properly treated. The answers to the other questions, propounded by the author, we have not been able to find anywhere in the text. This is to be regretted. Under the head of diagnosis the essential features of difference between autumnal catarrh and ordinary catarrh, bronchitis, pneumonia, local inflammation of the eyes, and June cold, are given, and the symptoms upon which a differential diagnosis is to be based are arranged in columns, side by side, upon the same page. The subject of prognosis is next introduced, and it is thought that autumnal catarrh, either of itself or its complications, has but little influence, generally, in shortening life.

The treatment of this singular disease is summed up as follows:

1. Remain in a non-catarrhal region during the critical period.

2. Strengthen the system by food and tonics.

3. Avoid dust, smoke, night air, and the vicinity of plants known to produce a paroxysm.

4. Dress warmly, with flannels next the skin.

5. For the cough, mild narcotics; various household demulcents.

6. For asthma, smoking strammonium leaves, saltpetre, Espic cigarettes, arsenical cigarettes, inhalation of sulphuric ether, carbolic acid.

A tabular view of one hundred and eighty-five cases of autumnal catarrh is then given, and the volume is finished by giving the histories of fourteen illustrative cases.

Dr. Wyman's book is worthy of diligent study, because it contains the clear and careful statements of one who is evidently conservative in thought, of one who does not first embrace a theory, and then look around for facts with which it can be substantiated. It will be specially interesting to those who are afflicted with the disease of which it treats, and will be a source of pleasure to the scientific reader.

We will now turn our attention to Dr. Beard's book upon "Hay-Fever."

Dr. Beard is one of the latest investigators of this disease. In the autumn of 1873, while associated with a number of hay-fever refugees, the idea of instituting an investigation of the disease was conceived, and the present volume is the result of the labor. The book has been shorn of technical terms, so that the laity, whom the author expects will constitute the greater portion of his readers, can read it with ease. It has been given to the medical profession as a book embracing a new theory concerning the cause of a disease long known, and it also contains a description of a new form of the disease, hitherto undescribed, and which the author calls "July cold." The text is divided into eight chapters. The first is devoted to the history of hay-fever, and contains a *résumé* of the literature of the subject with comments upon the methods of investigation heretofore adopted in the study of this peculiar affection. Dr. Beard in this chapter has also pointed out what he regards as defects in former methods of observation, and attributes the failure to solve the problem of the disease "in part to a want of sufficient number of facts relating to it, and in part to a habit—from which even scientific men are not free—of looking at one side rather than all sides of a subject." We are not quite certain but that the doctor belonged to that class of scientific men, while making his investigations in this direction. He has announced a theory with regard to the cause of this disease, nothing more, however, than one strongly foreshadowed by Dr. Wyman, but whose conservatism does not permit him to give it its positive announcement, and has rejected all others. We are led to the

conclusion, therefore, that his evidence upon this point is positive, at least that it is convincing to himself, and that at once places its advocate on a slippery base to withstand the wave of scientific criticism. When the author claims that the phenomena of the disease cannot be developed unless one of these factors is present, namely, a certain individual predisposition, he has said no more than has Dr. Wyman, when speaking of what he calls "individual predisposition;" nor do we see that he has arrived any nearer to an explanation of why such and such symptoms, common to a large number of diseases, break out only at certain seasons of the year, and at no other, in persons having such an individual predisposition. In other words, Dr. Beard has not brought us any nearer to the essential cause of the disease.

Let us study the book somewhat more in detail. Its author claims that the disease is one that belongs to the modern civilization of the nineteenth century, and bases his conclusion largely upon the fact that the symptoms are so well marked, that it could hardly have escaped notice by the physicians who lived in the preceding centuries.

The literature of quite a number of diseases, however, is very modern, and their symptoms, according to modern methods of examination, are as easily recognized as are those of hay-fever, and yet we know of no one who has claimed that they are diseases of modern origin. Indeed Dr. Beard admits that no longer ago than half-a-century the disease may have escaped recognition for many years. Is it not possible, nay probable, that it escaped recognition entirely prior to the present century, and not that it did not exist? "The author's method of investigation," given in the second chapter, is a step in the right direction; for he has sought for "facts and not opinions," and from such facts he has deduced his general conclusions. The facts were obtained by sending out circulars containing a series of questions relating to matters of fact concerning which the majority of intelligent people are more or less competent to judge.

To this method of obtaining facts, however, we suspect there is an insurmountable obstacle, namely, the answers, in very many instances, at least, must come from those who are entirely incompetent to discriminate between facts and opinions, and will send the latter for the former. "With regard to the number of cases of which statistics should be obtained, it soon became evident," says the author, "that one hundred, or even less, if given in full detail, according to the plan indicated in the circular, ought to be sufficient to enable one to arrive at some definite conclusions," and yet Dr. Beard enters a criticism upon Dr. Wyman's statistics, because they have been made upon only *eighty-one* cases, and of a certain number of those the history had been only partially detailed. What does Dr. Wyman say upon this point? On page four, of the introduction of his book, we find the following language: "Several illustrative cases are given in full, and one hundred are collected in Tabular View" at the end of the volume. "The cases collected and the completeness of the histories," which in another place, the doctor states, were derived "from personal examination of those suffering from the disease, the description being carefully written down, and corrected in their presence," "derived as they are from various parts of the United States, especially the northern section, warrants me in giving a general description," etc. It can be seen, therefore, that the number of cases thought to be necessary by Dr. Beard has been obtained by Dr. Wyman, and with the item of favor that their histories were obtained by his personal examination. Dr. Beard's statistics, therefore, can be turned against him, because of an insufficient number of cases upon which to base them, and also from the additional and very important fact that his histories have been largely obtained from non-professionals, and perhaps incompetent observers. His two hundred cases, according to his own admission, are no more valuable than one hundred fully recorded cases, and such a number has been observed and recorded personally by Dr. Wyman. We find one hundred and eighty-four cases in his tabular view.

In the third chapter are given the statistics of Dr. Beard's two hundred cases, based on the circular of inquiry. This collection of material shows that the author has been actively at work, and he has gathered much that will interest both the general and scientific reader. The author's general conclusions are given in chapter four, and the first is that "Hay-fever is essentially a functional disease of the nervous system." This conclusion is based upon the following facts:—1. "The hereditary character." The disease may be hereditary, but heredity can scarcely be said to qualify it for a position among the neuroses. If so, several, which have heretofore stood without the pale of nervous diseases, must be brought within. This view seems to have been anticipated by the author, for he admits that hay-fever might be a blood disease, and yet be as hereditary as it now is; but taken in connection with the following facts and considerations, the essentially nervous character of the malady he believes established "beyond serious question." 2. "It prevails mostly among those who have a constitutional tendency to diseases of the nervous system." We were not aware that those who suffer from hay-fever, are any more liable to be afflicted with nervous diseases, such as neuralgia, sick-headache, hysteria, dyspepsia, chorea, etc., than those who are exempt from the affection. If so, let us have the statistics to prove it. Again, it is claimed that the disease rarely, if ever, occurs among the poor and laboring classes of our large cities; and yet it cannot be said that nervous diseases are uncommon among that class, or that they do not possess the nervous diathesis. Certainly, as delicate organizations are found among the poor as among the rich, and keen intellects are not a specialty behind brown-stone fronts; and now if the hay-fever is a nervous disease, it must be a peculiar nervous disease, and endowed with the power of selection. It would seem from the author's observations that the disease has a rather aristocratic tendency, and yet he denies that it is "a fashionable disease." 3. "It is peculiar to modern civilization." How do we know? There is no evidence in the book that the investigations have been extended beyond the border where civilization ceases. 4. "The symptoms of the disease through all the stages are largely of a nervous character, and are made worse or better by mental influences." Not long since we had the pleasure of listening to an introductory lecture, in one of our medical colleges, in which the learned speaker alluded to humor as one of the good things to be carried into the sick-room by the doctor, because of the beneficial influence it exerted. We believe that, in almost any condition, the patient can be made actually better by proper mental influence, but were not aware that that fact possessed any special significance in arriving at the cause of the disease. "True enough, symptoms indicative of inflammation," says Dr. Beard, "do appear as the result of this irritation, but it is not necessary or just to argue that they are the disease, or that the disease is of an inflammatory character, because they appear in it."

What hinders from changing the above quotation, so that it shall read as follows: True enough, symptoms indicative of the presence of a nervous element do appear as the result of this irritation, but it is not necessary or just to argue that they are the disease, or that the disease is of a nervous character because they appear in it. There may be a peculiar condition of the system which permits the development of the disease, and, indeed, there may be a peculiar condition of the nervous system, but the same may be said regarding many other diseases, which, at present, at least, are not recognized as nervous diseases. 5. "It is affected for better or for worse largely by those influences that operate through the nervous system," and the remedies which are mentioned as having rendered the greatest service in its treatment are quinine, arsenic, electricity, alcohol, stramonium, opium, and ether. As is well known, these remedies are used in the treatment of a host of diseases outside of those commonly called nervous, and some of them are regarded as sheet-anchors for the medical man. But, it is said that they are "pre-eminently nerve remedies." That may be true, and it may also be true that the good results obtained by their use in the treatment of peritonites, malarial fevers, etc., are because of the peculiar influence they exert upon the nervous system; yet we believe it will be hard work to make the profession place such diseases in the category of neuroses. We think Dr. Beard's argument, in the case under consideration, proves altogether too much. In continuation of his line of argument, the author compares hay-fever with ordinary asthma and sick-headache.

Of the pathology of functional diseases of the nervous system but little is known, hence the author's remarks upon this question are brief. In his remarks regarding the unity of early, middle, and later forms of the disease, the following conclusion is reached: "The symptoms in all three forms are the same in kind, differing, if at all, in degree only." The author believes that we here have but one disease, and we endorse the conclusion for this reason, if for no other: it simplifies our study of it, and avoids needless confusion. We fear that there is already existing too great a tendency towards division and subdivision at the risk of attenuation in the study of disease, and we therefore hail with delight a step towards comprehensive observation.

Chapter V. is devoted to the symptoms and course of the disease; and here we have written substantially what has been written over and over again. The characteristics of the attacks are considered under three heads: 1, The suddenness of their onset; 2, their paroxysmal character; and 3, definite stages with remissions. These are excellent divisions for bringing out whatever phenomena of the disease may have a favorable bearing upon the nerve theory. *Four* stages are made, namely: the *premonitory*, the *catarrhal*, the *bronchial*, and the *spasmodic*. These are substantially those made by Dr. Wyman. Under the head of permanent, or after effects, Dr. Beard states that hay-fever *usually* leaves the mucous membrane in as healthy a condition as it found it, and uses it as an argument in favor of his theory. Dr. Wyman, on the other hand, maintains that the mucous membrane *unquestionably* becomes implicated secondarily, although he gives the reader no idea as to how frequently temporary hypertrophy, or permanent thickening occurs. As to the facts, then, in this particular, the two authors stand upon nearly the same base. Diagnosis and prognosis are taken up in the sixth chapter, and the points in differential diagnosis between hay-fever, common cold, ordinary asthma, and acute bronchitis, are given. With regard to prognosis, it is said that hay-fever is a life-long heritage, and rarely shortens life. The statements made in this chapter are substantially those made by Dr. Wyman in the corresponding chapter in his book, with the exception that Dr. W. has given the differential diagnosis between autumnal catarrh, common cold, acute bronchitis, and June catarrh, and also pneumonia and conjunctivitis.

In the seventh chapter the author presents his views relative to prevention and treatment, and starts off with the commendable effort to disabuse the profession and the people of three serious errors: 1, That death is the only cure; 2, that all medicinal treatment during the attack is useless, or worse than useless; and 3, that some specific may yet be found that will prevent or relieve all cases.

The first error, to a very great extent, has been corrected; for sufferers have learned that there are places of refuge where the enemy does not follow. The preventive and curative influence of the mountains and the sea are now well recognized. The chief aim, therefore, in this chapter, is to correct the second and third errors.

It contains a goodly amount of material which is well arranged, but we fail to note very much that is new. A large number of remedies, and several combinations of remedies are mentioned, that can be used for local and general treatment, and, doubtless, used with very great advantage. Nitrite of amyl is spoken of as a remedy worthy of trial, and is said to be harmless. Upon that point there is some difference of opinion. We also believe that the author will, in the second edition, amend the statement regarding the frequent repetition of two-drachm doses of the muriate tincture of iron. That is beyond Dr. Prout's dose, which the author endeavors to give. Dr. Beard has not attempted to indicate by any map the exempt region, for he does not believe there is any "arbitrary limit of elevation or of latitude." "No mountainous region can afford uniform relief every year for all persons."

The last chapter is devoted to illustrative cases. These, for the most part, were written up by the patients themselves, and, although it is a very unsafe method of obtaing *facts*, instead of opinions, they seem to be very fully and fairly stated. There are some deficiencies, however, in the histories, which could hardly be supplied by patients, perhaps, but which are quite important as aids in arriving at scientific conclusions concerning the nature of the affection. Notable among these is the lack of any thermometrical record, and the rate of pulse and respiration are not given in a single case reported, either by the patients themselves or by physicians. These are important clinical items, and should not have been overlooked, especially in the double effort of establishing the unity of two forms of disease, heretofore regarded as distinct, and giving a new theory with regard to the etiology of these two and a third form hitherto undescribed. Dr. Beard has produced a book, as has been his custom, in a remarkably short period of time since he began his observations upon hay-fever, and we are sorry to say it has the impress of hasty preparation. It is quite evident that he is enthusiastic in the advocacy of a new theory, and we fear that in this instance his enthusiasm has got the better of his usually good judgment, and led him into the delusion that there was no better way of announcing such theory than by writing a book. The result has been that the work contains a large amount of material that is hackneyed, and, it is to be feared,

will not satisfy the scientific investigator, however pleasing it may be to the non-professional reader.

Reports of Hospitals.

ST. FRANCIS' HOSPITAL.

NOTES OF PRACTICE AND PECULIARITIES OF TREATMENT.

G. M. EDEBOHLS, M.D., HOUSE PHYSICIAN.

THE COLD BATH IN THE TREATMENT OF TYPHOID FEVER.

In patients possessing the average physical strength, and sick with typhoid fever, the cold bath is employed promptly whenever the temperature of the body rises above 103½° F. The patient is immersed to the neck in water having a temperature of 85°–90° F. and cold water is then steadily added until a bath having a temperature of from 58° to 60° F. is obtained. After remaining in the bath from ten to twenty minutes, the patient is removed, rubbed dry, enveloped in a blanket, and put in bed, and an ounce of brandy administered to aid in establishing reaction. The thermometer is used fifteen minutes after the patient has been placed in bed, and the temperature in the rectum in the male, and in the vagina in the female, has, as a rule, been found to have been reduced from 2½°–4° F.

If at any time during the employment of the bath, symptoms of marked prostration supervene,—as evidenced by decided chilliness, lividity of the surface, most readily detected on the prolabia and nails, chattering of teeth, etc.—the patient is immediately taken out of the water, rubbed dry, and warmly covered in bed.

A patient was seen in whom the disease had run its full course twice since his admission to hospital. In the second attack, which was of unusual severity, the cold bath was administered forty-six times in the course of thirteen successive days. The man at the time of the visit was considered as convalescent.

The character of the eruption had been found to be a pretty safe guide with reference to endurance of the baths in any given case. As a rule, when the eruption has been abundant, and of a deep-red color, the reaction after the use of the bath has not been what was desirable, and a few trials has been sufficient to convince the attendants that it was necessary to have recourse to some other form of antipyretic treatment.

QUININE IN TYPHOID FEVER.

In conjunction with the cold bath, quinine might or might not be administered. When, for any reason, cold water is contraindicated, chief reliance has been placed upon the antipyretic influence of quinine. The drug has been used in the following manner: *First.* It has been given in small doses frequently repeated (5 grains every two or three hours). *Second.* Twenty or thirty grains have been administered in one or two doses at the time when the temperature was highest, generally late in the afternoon. *Third.* The same quantity has been administered in one or two doses when the temperature had about reached its lowest point.

Of these three methods, the first had exercised but little influence in controlling the temperature; the second had generally yielded tangible results, in so far as the temperature, taken from one to three hours after the administration of the drug, had generally been found to have been more or less reduced; but the improvement was only transient, and another large dose was soon required. The third method was considered the most judicious, and was the one generally employed. The temperature in cases of typhoid fever has been taken every three hours, in the rectum in males, and in the vagina in females; and the average of the twenty-four hours, in patients treated by the third method, has been found to be lower than that of the cases in which quinine was administered in accordance with the first two.

IODINE IN TYPHOID FEVER.

Iodine has usurped the place of the mineral acids, and is given internally in all cases of typhoid fever. It is thought to lessen the troublesome gastric irritability so often present, and to diminish the number of evacuations from the bowels.

The following formula is usually employed:

℞. Iodinii ..... ʒ j.
Potassii iodidi.... ..... ʒ ij.
Aq. dest..... ʒ x.

M. Gtts. iij. in wineglassful of water every three hours.

Lugol's solution, the liquor iodinii comp. of the Pharmacopœia, may be used in doses of six drops every three hours.

The cold bath, quinine and iodine, with close attention to the diet and the exhibition of stimulants when indicated, constitute the main features in the treatment of typhoid fever. The cold wet pack is occasionally substituted for the cold bath when the latter is not well borne.

ENLARGEMENT OF THE SPLEEN.

Enlargement of the spleen, demonstrated by percussion, has been present as early as the latter part of the first week in all the cases of typhoid fever treated at this hospital during the last two years. Notice was made of this fact, not on account of its supposed singularity, but for the purpose of directing attention to its value in a diagnostic point of view. The enlargement of the organ, it was claimed, could in most cases be ascertained before the appearance of the eruption, and was almost invariably present at the period of the disease when patients generally apply for admission to hospital. When great tympanites exists the spleen may be crowded out of its normal position, and it must then be searched for posteriorly, where it will usually be found lying against the ribs and the side of the vertebral column.

CHRONIC BRONCHITIS WITH EMPHYSEMA—APOMORPHIA.

It has become a sort of routine treatment for cases of chronic bronchitis with emphysema, to administer from one-third to one-half a grain of apomorphia daily, and continue it for some time. It has been given by the mouth, and continued for two or three weeks without annoyance to the stomach. It was believed that the patients did better with than without it, although other medicines were at the same time administered.

INJECTION OF PULMONARY CAVITIES.

In several cases, a hypodermic needle had been thrust through the chest-walls, and into cavities in the lungs, and a few drops of a one and one-half or two per centum solution of carbolic acid injected. *No bad effects have been produced*, and it had seemed to lessen the expectoration and cough, and thus modified the fever.

Correspondence.

MEDICAL CENTENNIAL AFFAIRS.

AMERICAN EXHIBITS—CHEMICAL AND PHARMACEUTICAL PRODUCTS AND MANUFACTURES—PILLS AND THEIR COATINGS—SURGICAL INSTRUMENTS, ETC.

PHILADELPHIA, Oct. 28, 1876.

THE authorities who superintended the classification of the medical exhibits, and their arrangement in groups and special locations, must have been sorely puzzled with the pressure from United States exhibitors for space and choice of position. They must have been seriously agitated, also, as to the point at which to draw the line which would exclude from the display the cheap or flimsy wares of the mere advertising charlatan, who would greedily occupy every inch that might be allotted to him. I think that, as a rule, a proper distinction has been made, and the process of exclusion sensibly and judiciously effected to prevent some of the vendors of proprietary medicines from flaunting their pretentious claims in the faces of their more creditable and refined neighbors, some of whom represent all that is delicate and nearly perfect in skill and workmanship. I could point out several such occupants of space which others may have vainly longed for, and I feel confident that neither the Medical Director of the Exposition nor any other medical authority was consulted in the matter of their admission. In dwelling on the characteristics of the foreign exhibits in previous letters, I was not so much embarrassed by their numerical richness as I am now, when I find the ground so completely covered by American exhibitors, vieing with each other in honorable competition in every possible field of art and science in which the physician may be interested. With so many hundreds represented here, I cannot do more than briefly glance at a few, and to none can I give more than a passing notice, wholly disproportioned in many cases to the beauty, excellence, or grandeur of the exhibit. Nor can I separate the absolutely beautiful from the intrinsically useful, for, as in the case of the manufacturers of chemicals and drugs, who have piled up mountains of expensive salts of alkaloids which dazzle the eye with their magnificent crystals and geometrical shapeliness, the qualities of utility and attractiveness seem to be harmoniously and suggestively blended.

In the department of chemical and pharmaceutical products, to which I will first allude, the United States is singularly demonstrative. It is but a step across from the domains of his Majesty, the Emperor of Germany, to the contiguous exhibit of our own republic, and the progress of this country in the refinements of the chemical art is almost the first feature that arrests the eye of the visitor. Such a display as that which Powers & Weightman, and Rosengarten & Sons, of Philadelphia, and others, here offer, was scarcely possible from any foreign contributors, as the delicate, fragile blocks and crystals would have suffered a fatal martyrdom at the hands of even exceptionally tender and scrupulous handlers of merchandise *en route*. The exhibit of Powers & Weightman is certainly surprising in voluminousness, and costly in its richness, as it is, of course, excellent in quality. A mass of sulphate of quinia that weighs 1,003 ounces, morphia blocks whose ounces are also numbered by the hundreds, sulphate of codeia and of cinchonidia and quinidia weighed by pounds, caffeine representing in an imposing crystallized mass three-fourths of a ton of coffee;—these are only a few of the grander portions of an exhibit made up of the handsomest and most attractive drugs and chemicals, as to color and crystalline form, that it is possible to conceive. Not less important is the display of chemical and pharmaceutical products by Rosengarten & Sons, of Philadelphia, particularly of the alkaloids of cinchona and opium. The barks represented are numerous, and some of the rarer salts of quinia, as the tannate and hypophosphite, are especially interesting. The salts of manganese present a beautiful appearance, and the large, though by no means handsome, mass of opium is well worthy of careful inspection. In the same department we may also notice particularly the exhibit of carbolic acid, citrate of bismuth and of iron and bismuth, propylamin and its compounds, the various preparations of iron in scales, etc., by Billings, Clapp & Co., of Boston. Over sixty specimens are handsomely displayed, and the exhibit is highly creditable, not only to Boston, but to New England. Charles T. White & Co., of New York, also make an attractive exhibit of general chemicals, giving prominence to morphia, quinia and its valerianate and strychnia.

The manufacturing pharmacists, who are closely identified with their neighbors already referred to in business relations, are intimately associated with them also in location at the Exposition, being participants with them in catering to the successful instruction and interest of hundreds and thousands of visitors who linger long in this remarkable department. Wm. R. Warner & Co., of Philadelphia, who had already received awards at many of the expositions at home and abroad, make a fine display of sugar-coated pills, fluid extracts, elixirs, artificial fruit essences, and the general products of a pharmaceutical laboratory. A figure of the goddess of Health revolves above this handsome and extensive exhibit of pharmaceutical excellence, as if to indicate, what may not be at all improbable, that a return to health may frequently be hoped for from recourse to articles of the materia medica so well prepared for popular use and for dispensation by the judicious practitioner. Phosphorus seems to occupy a prominent place here, the element being declared to be thoroughly diffused and subdivided, and perfectly protected from oxidation. Bullock and Crenshaw, of Philadelphia, also make a fine display of a most reliable collection of similar pharmaceutical preparations and chemical apparatus. They were among the very earliest to practise sugar-coating of pills in this country, and their list includes an immense number of officinal and other formulæ. We naturally find the contest between the sugar-coaters, the gelatine-coaters, and the compressors of pills carried into the very Exposition itself. It makes but little difference to whom the award may be given by the judges of this department; the discussion of the merits of each form of pill will grow warmer from the jealousies of the chemists and pharmacists who advocate it. Medical men will doubtless be incited to a closer scrutiny of their claims by the agitation, and will weigh the arguments of each, especially of those which have received the commendation of the judges of award. Frederick Stearns, of Detroit, has endeavored in his exhibit of the products of pharmacy, such as pills, elixirs, fluid extracts, spices, troches, effervescing granules, etc., to illustrate the progress made towards rendering remedies pleasant to the eye and agreeable to the taste. His cases are said to represent nearly ten thousand items, and his sugar-coated pills are described as being made by building up in steam-warmed revolving pans, first the pill itself

upon a minute granule of cane sugar, and afterwards coating the same with pure sugar, using no varnish—softness, porosity, and solubility being aimed at, rather than perfection of sphericity or whiteness. McKesson and Robbins, of New York, are, in addition to being manufacturers of fluid extracts and other preparations, well-known as the advocates of gelatine-coating for pills, and of pills so covered they make a very interesting exhibit at the Exposition. It is not our province or purpose to enter into this controversy, but simply to direct attention to this coating as another popular form of administration. Who shall decide until pharmacists themselves agree? A smaller amount of excipient is said to be required in this process of gelatinizing the granule, a fact that is in some respects a recommendation, even if it should, as it doubtless does, give the homœopathic practitioner frequent opportunities of employing regular medical preparations, for which the doctrine of infinitesimal doses will claim all the credit. Another advocate of gelatine may be found in Keasbey and Mattison, of Philadelphia, who also make a special display of granular effervescent preparations—tasteless quinia, being quinia disguised by admixture with compound tincture of eucalyptus; citrate of caffeine, etc.

Outside of the domain of general chemical or pharmaceutical manufactures, may be mentioned several interesting allied products of general interest to the medical man. Perhaps there are none more so than the exhibition of the mode in which the natural mineral waters of Saratoga can be transported, in all their original purity and freshness, to a distance, as to Philadelphia—a fact of which the writer can speak from personal knowledge. Here is an exhibit by A. B. Lawrence & Co., of Saratoga, of Union and Excelsior Spring water, on draught, which have been barrelled by hydrostatic pressure, the water being conveyed from the spring, at a depth of twelve feet below its overflow, to the barrelling vault, through a block-tin pipe into block-tin-lined reservoirs, the gas being thus prevented from escaping. The mechanism inside the reservoir consists of two block-tin tubes, one of which, a long tube, leads from top end to bottom of the reservoir, and the other, a very short tube, also inserted and firmly secured at top end, merely extending through and attached to the block-tin lining. The atmospheric air is driven out through the short tube, and as soon as the reservoir is filled with water, both tubes are closed perfectly with screw caps. This is undoubtedly a much more satisfactory method than that sometimes adopted by druggists, who honestly dispense the other natural waters of Saratoga in the best way at their command, infusing into them the sparkling vitality, which they do not usually possess after transportation, by a few turns of the carbonic acid spigot. I say this much of the honest apothecary, because I know that artificial Congress and other waters are often palmed off on the unsuspecting for the natural article.

Aschenbach & Miller, of Philadelphia, in their exhibit point out the success of chemistry in imitating the flavors of fruits, and, although this would not at first sight appear to be a subject in which physicians are particularly interested, it may be a matter of some surprise to many of them to learn how perfectly raspberry, pineapple, and other flavors are imitated by compounds made from acetate, butyrate, and valerianate of amyl, all derived from the disgusting fusel oil or amylic alcohol; also from acetate, butyrate, and formate of ethyl, the butyric ether being obtained by subjecting grape-sugar to the lactic acid fermentation, old cheese or putrefying meat being used as a ferment.

Among the derivatives from petroleum which have come into use during the few years past, has been a substance called cosmoline, manufactured by E. F. Houghton & Co., of Philadelphia, and said to be a heavy, paraffinous, oleaginous hydro-carbon, purified and concentrated, and used externally in various forms of camphorated, carbolized, and other preparations, all of which are exhibited at the Exposition.

I offer these merely as samples of the kinds of exhibits to be seen in this department, with no intention to slight numerous other manufacturers and dealers, whose displays may be equally meritorious.

The collection of surgical instruments constitutes a very attractive feature of the American medical exhibit. Undoubtedly the finest displays are those made by Geo. Tiemann & Co. (Stohlmann and Pfarre), of New York, Codman & Shurtleff, of Boston, and J. H. Gemrig, of Philadelphia. The Boston firm has been allotted the greatest amount of space, from the fact that their exhibit includes not only a large collection of surgical instruments, but also of dental and other appliances and machinery. These three firms undoubtedly represent all that is novel and effective in the mechanical applications of the instrument-maker's art to the assistance of the surgeon, and in the perfection of design, ingenuity, and finish in this direction. I will take as an illustration of novelties in this useful department the exhibit of the centrally situated member of this trio, the old-established house of Tiemann & Co. Their Centennial case, of rosewood, and valued at eleven hundred dollars, contains the instruments for almost every important operation, and has nine trays or drawers, which can be removed and carried as separate cases by enclosing each in its appropriate leather pouch, each tray holding the instruments for a special operation, as amputations, for the eye, lithotomy, etc. We notice, also, a portable army pocket-case, to be carried like a cartridge-box by a shoulder-strap, from which, for hospital or office use, it can be readily removed by a slide; also an aspirator pump of celluloid, on a new model, which may be used for the stomach and for injecting purposes, one end exhausting, and the other expelling the fluid; all the new stricture dilators and cutters; a new rotating osteotome; fenestrated embryotomy forceps, and œsophagus forceps, which open with wide jaws, without increasing the size of the stem; all new forms of parallel dilators for forcible dilatation of the uterus; uterine or tonsil aspirator, which incises and immediately exhausts the blood or pus; water-lined trusses; painless hypodermic syringes; automatic ligatures a clamp needle which brings the edges together and yields a little to the swelling; a new sphygmograph with a laterally moving indicator; a new form of pocket spirometer; double curved self-registering thermometer; a new flexible chain saw, made up of steel beads, and capable of motion in every direction. These are specimens taken at random from a brief inspection of a case full of novelties, and are merely mentioned as an indication of the improvements constantly going on in the department of surgical manufactures. Horatio G. Kern, of Philadelphia, in an interesting exhibit of surgical and other instruments, claims peculiar merit for his dental extracting forceps, from the adaptability of such forceps to the particular tooth it is intended to extract. seventy-five varieties of the instrument being manufactured, without a duplicate in form.

Mr. T. Mellroy, of New York, exhibits several very ingenious and complete invalid and fracture bedsteads, surgical operating tables and chairs, and various requirements for the comfort of invalids. These

are most of them so well known, from their employment in the army and navy medical services, in civil hospitals and private practice, that it seems almost unnecessary to describe them. Such appliances, as the inventor states, are not only for the comfort of the sick and afflicted, but for the ease of the nurse and the convenience of the doctor. The collection includes an invalid and elevating bedstead, a hospital bed, a fracture extension appliance, a surgical operating table for hospitals, an oculist operating chair, a speculum or operating chair, and a recently invented revolving post-mortem or anatomical table, with scales weighing from a quarter ounce to 600 pounds, etc., proper attention being paid to its interior ventilation, communication with the sewer, etc.

R. J. D.

THE TREATMENT OF ASTHMA.

To the Editor of The Medical Record.

Sir:—The letter of Dr. Beard, in the last issue of the Medical Record, is very strange if meant as a reply to my communication (in No. 310, Medical Record). He first makes some erroneous statements, unjustly ascribing them to me, and then refutes them himself. This may be an easy method of convincing those unacquainted with the subject under consideration, but it is certainly illogical, to say the least. I distinctly stated in my communication to you, Mr. Editor, that I did not wish to enter into a discussion as to the priority of the nerve-theory of asthma or its treatment by galvanism; I merely mentioned the facts that in 1870 I read a paper on asthma, and published it in my *Galvano-Therapeutics*, where (long before Dr. Beard) the nerve-theory of asthma was clearly pointed out, and my methods of treating it by the galvanic current were given in detail, with illustrations of cases treated by me according to these methods. These statements I still maintain, because they are perfectly correct, leaving Dr. Beard responsible for his erroneous statements.

Very truly yours,
Wm. B. Neftel.

AMMONIUM BROMIDE IN HAY-FEVER.

To the Editor of the Medical Record.

Dear Sir:—I desire to call the attention of the profession to the local use of ammonium bromide as a means of relief for the distressing symptoms of summer or autumnal catarrh—hay-fever, so called.

It is well known that the bromides, when administered internally for a number of days, produce anæsthesia of the pharyngeal mucous membrane; and some practitioners (myself among the number) have used a strong solution of one of the bromides as a gargle, in cases of irritable throat, with excellent results. I have also employed ammonium bromide as a vaginal injection in a case of irritable bladder, with immediate good effect.

Reasoning from the above facts, I was led last summer to suggest to my friend, Mr. S. A. Solomons, a student of medicine, to make a trial in his own person of a solution of ammonium bromide as a wash for the nasal passages and as a gargle, to relieve his hay-fever. He tried the experiment, and obtained marked relief, infinitely more than he had obtained from any other means. Mr. Solomons also prescribed the solution (to be snuffed up into the nostrils and used as a gargle) for a lady who had been a martyr to the disease for many years. In a short time this patient wrote, saying that the bromide had almost entirely relieved her of the irritation attendant upon the disease, and expressing her great gratitude for the suggestion.

I would ask physicians to make an extended trial of this medicine, as follows:

1. A solution of ammonium bromide, ʒ j. or ʒ ij. in water ℥ j., to be used as a gargle frequently.

2. A solution of the same salt in the proportion of 10 or 30 grs. to water ℥ j. to be inhaled into the nostrils—not forced in with a syringe or douche apparatus.

It is very probable that by means of a spray-producing apparatus these solutions may be better applied to the larynx, throat, posterior and anterior nares.

Yours very truly,
E. C. Seguin, M.D.

P.S.—The suggestion is made without any reference to the parasitic or neurotic theories of the disease.

PROF. BILLROTH AND HIS OPERATIONS.

To the Editor of The Medical Record.

Sir:—Without any invidious comparison, it may fairly be said that there is no operating theatre in Vienna so popular as Professor Billroth's. The cause of this is not wholly unconnected with the qualities of the principal performer. A profound pathologist, an accurate anatomist, an operator bold to the verge of rashness, an easy conversational lecturer, an accomplished linguist, a good blackboard draughtsman, are qualities not every day to be found combined in one who, during the most severe and tedious operations, preserves an amiability and unpretentiousness which makes his presence a companionship to the youngest assistant. Nor does one often find the strength and endurance of a blacksmith uniting these qualities on the one hand to a distinguished social reputation as a composer and pianist on the other. A combination of qualities like this, in one so favorably circumstanced, could hardly fail in achieving the popularity and success which Prof. Billroth has accomplished. In the theatre Prof. Billroth is attended by nine assistants, all of whom he encourages to operate there occasionally, and thus secures for them a sort of training not afforded in any other operating theatre with which I am acquainted. All the apparatus is according to Lister—carbolized gauze, carbolized oil-silk, carbolized caoutchouc, salicylic charpie, salicylic jute, etc.—most of them of the exquisite Schaffhausen manufacture, being ready in proper order. That pest of surgeons, ready-made (non-) adhesive plaster, is here unknown, the emplastrum diachylon being always freshly spread on linen cloth as required for use, and is always soft, pliant, and thoroughly adhesive. The ligatures on hand are carbolized catgut, fine silk, and fine flax—the two latter lying in a carbolic solution. The flax, though fine, is very strong when wet, and is more generally used both for ligatures and sutures. The instruments to be used are laid out in a carbolic solution of a strength of three per cent., contained in shallow porcelain trays, in which also, before commencing to operate, the fingers of the operator are dipped, as also from time to time during the operation. Billroth has a peculiar penchant for bull dog forceps (with slide). Instead of waiting to tie arteries as he proceeds, they are instantly seized and left in the care of the forceps—as many as twelve of them have I seen hanging like leeches from a wound—until, a convenient stage of the operation being reached,

they were, as far as necessary, relieved by ligatures. This plan greatly facilitates despatch, and is particularly convenient and serviceable in the extirpation of large fibrous or carcinomatous tumors. In the closure of wounds, Billroth uses a great many sutures, making coaptation as perfect as possible, but uses drainage tubes very freely. From a wound by no means large, following extirpation of the rectum, I have seen as many as eleven drainage tubes projecting. In the Lister dressing (which, after unsuccessful experiments with boracic solutions, has been reinstated with increased care), an improvement in the way of economy has been introduced. For the caoutchouc, or oil-skin, previously placed between the sixth and seventh layers of the Schaffhausen carbolized gauze, paper has been substituted, so prepared in a mixture of linseed oil, white wax, and litharge, as to answer the same purpose. In such a large hospital a great saving is thus accomplished.

The *Anæsthetic* used by Billroth is not unlike that used by Dittel, consisting of three (3) of chloroform, one (1) of ether, and one (1) of alcohol. The special advantages claimed for this mixture is that it rarely produces cramp or vomiting. Upon the whole, I think its claims are sustained. However, vomiting not only does occur with it, but it has taken place precisely when it was most likely to prove disastrous.

The *Inhaler* in use here and generally throughout Vienna is a very simple affair. A scoop of wire-work, large enough to cover the nose and mouth, is covered with a single cap of flannel, which is tightened around the frame by gusset and tape. The anæsthetic is poured upon the outside only, and in drops, the bottle always having a stopper-tube attachment. The patient can breathe either through or under this inhaler, as may be desired. It is light, handy, cheap, and for safety, simplicity, and economy, this method of administration is highly to be commended.

Esmarch's Method, when practicable, is never omitted; the elastic tube is entirely discarded—an elastic band, simply a little narrower than that used for the preliminary compression, being substituted for it. There is a suspicion, however, that in addition to the temporary paralysis sometimes caused by this method, it has a tendency also to interfere with prompt primary union. From a multitude of cases and facts observed, the following may be not devoid of interest:

Lymphoma Maligna has in three successive cases been recently treated successfully. In the last case, a man thirty years of age, a very large number of the superficial lymphatics were exceedingly enlarged. The treatment was Fowler's Solution, five drops, gradually increased to twenty, internally daily. Also, into the body of each tumor, by turns, an injection of one drop occasionally, several of them being injected every day. The tumors at first were quite stubborn, but after beginning to be soft and movable, they progressed rapidly to disappearance.

Atheroma of the Lower Jaw—in point of location so rare, Billroth had never before seen it. The patient was a woman, twenty-five years old, and the tumor, which was situated just beneath the bicuspids and first molar on the right side, was about the size of a walnut. It had been growing about two years, but had been painful about two months only. At first sight it might have been taken for epulis or dentigenous cyst; but on proceeding to operate, the tumor was found to consist of a cheesy, calcareous mass. The surface beneath, after being well scraped to the depth of about (3) three millimetres, looked healthy, and the wound healed without further trouble.

Obliteration of the Vena Azygos.—In this case, which was more interesting than instructive, a man aged fifty had great œdema of the face and neck, and enormous distention of the superficial veins of the thorax, but with no evident cause. The diagnosis made at the time was occlusion of the superior vena cava, by a substernal tumor, and a preparation in the museum, with which this case was supposed exactly to correspond, was shown in illustration of the patient's condition. Two weeks afterwards the patient died in the wards of Prof. Bamberg, from suffocation. It was then found that the obliteration was of the vena azygos, and the cause of it a strumous tumor of the thyroid gland, which had more recently become carcinomatous. A full description of the pathological condition and collateral circulation will shortly be published by Dr. Chiari, who is making a careful preparation of the subject, which will probably be sent to the next Paris Exhibition.

Prolonged Interval in Carcinomæ Linguæ. — A healthy-looking man, æt. fifty-five, presented himself for the extirpation of a small epithelioma, which for two or three months had been growing on the left side of the tongue. On the right side of the tongue was a healthy cicatrix, marking the site of an extirpation of an epithelioma fifteen years ago by Schuh, Billroth's predecessor. To Billroth, who is a relentless extirpator of cancer, this was a gratifying incident.

Subcutaneous Osteotomy.—Not only in club-foot, but in rachitic deformities of the legs, I have never seen a case present itself here, however bad, but its treatment has been undertaken, the courage displayed and the results obtained being very interesting to witness. One patient, a young man, eighteen years old, I saw, upon whom subcutaneous osteotomy of both tibiæ had been performed only two years before for double valgus, and in whose gait there remained no trace of apparent deformity. This operation Billroth practises only when simple manual force is insufficient. In its performance he never uses the saw. An incision is made as small as will admit a small chisel, and then, with this and a hammer, the tibia is divided, if necessary, completely; but if not, only so far as will enable the operator to use manual force most effectively. All the straightening gained is immediately secured and maintained by plaster-of-Paris dressing. In no case, even when the treatment has been most daring, have I failed to see the results more than justify the measure.

Extirpation of the Rectum.—Though somewhat singular, this operation is with Billroth the rule rather than the exception for carcinoma of this region. Almost the only limitation he makes is that all the parts diseased are within easy reach of the index finger. I think, however, I have seen this limitation decidedly overstepped in one operation, in which en route the membranous urethra and prostate were as cleanly dissected as if for a preparation. After the extirpation the cut end of the rectum is brought down, and as far as possible stitched to the integumental margin of the wound. This, however, generally breaks away and retracts, leaving a large excavation to be filled in by granulation. The important matter of keeping this excavation clean is accomplished only by at first the free use of drainage tubes, and afterwards by diligent irrigation. Of the six cases under my observation, the youngest of which was a female of twenty-two, four made a good recovery, and did not suffer from involuntary discharge of fæces. Of ten previous cases, Prof. Billroth tells me four died, and the rest did well—a success as regards the primary results which is certainly encouraging in this field of surgery.

Hysterotomy and Ovariotomy.—In these operations

Prof. Billroth always uses the clamp; for ligatures, if necessary, usually carbolized catgut; and for sutures, carbolized fine silk; he leaves generally two or three drainage tubes in the wound, and, as may be supposed, finishes with the Lister dressing. In one case of hysterotomy which did well—in a patient æt. twenty-five—for about two months after the operation a fistula continued in the abdominal wound communicating with the vagina, the lips of the fistula being vaginal mucous membrane. Under occasional application of nitrate of silver, it closed without trouble. In another case of hysterotomy, in which, besides other bad symptoms, meteorism was very troublesome, intestinal puncture wss resorted to; but it availed nothing, and the patient died the following day. At the post-mortem the intestine was found to be rendered impassable; a Meckel's diverticulum about six inches in length encircled it, and this, with the advent of inflammation, had caused strangulation. The puncture was found to have been below the point of strangulation. Only a few days afterwards similar symptoms occurred, with fæcal vomiting, in another case, and, warned by the recent experience, Billroth for the first time, as a sequel to ovariotomy, performed enterotomy. The bowel was thus emptied and kept so, and vomiting did not recur; but the next day the patient died. The cause of the strangulation was deemed to be twisting of the bowel and adhesive inflammation of a portion of mesentery.

In two cases in which the clamp could not be used, the pedicle was secured by carbolized silk ligatures, which were cut off short. They were both exceptionally bad cases, and both died. In one of them, in which several ligatures had been used, and in which death occurred on the eleventh day, on examination I found none of the ligatures coated by lymph or fibrine.

Having by the kindness of Prof. Billroth been present at all his operations of this class for the past four months, both private and public, I have been principally impressed with the fact that amongst the private cases there has not been one death—these having occurred exclusively in the general hospital. The youngest cases have been respectively seventeen and twenty-one, and these, from first to last, progressed more rapidly than any others on the list. When the number of cases he wishes first to complete is reached, Prof. Billroth will publish his results.

B. Howard, M.D.

Vienna, October 4, 1876.

IS ALCOHOL A FOOD?

To the Editor of The Medical Record.

Dear Sir:—In a previous number of The Record, Dr. Mays seems to desire to support the theory that alcohol is a food. The question presents itself, What is a food? that which supports life, or that which replenishes tissue?

Does alcohol support life? Does it contain those elements which replenish the tissues of the body, as they are day by day worn out and cast off?

Organic chemistry teaches that all tissue material supplies contain nitrogen as an essential part; that all force-giving foods are hydrocarbons. Alcohol contains no nitrogen; hence it cannot be a tissue food. Is it then a force-supplying food? No.

In the researches of Dr. Anstie, assisted by Dr. Dupré, the results of his experiments were unmistakable in their bearing on the question.

Hydrocarbons produce force by oxidation. Alcohol is a hydrocarbon, and, if consumed in the body, must produce heat, in order to rank among the heat forming foods. Does alcohol cause an increase of animal heat? The experiments of Dr. Benjamin W. Richardson,* of Edinburgh, on this question, go to prove that, instead of producing animal heat, it diminishes the heat in the body. He divides the progressive changes of animal function from alcohol into four stages:

1st. Stage of excitement, with relaxation and injection of the blood-vessels of the minute circulation with which we have become conversant.

2d. Stage of excitement, with muscular inability and deficient automatic control.

3d. Stage of rambling, incoherent, emotional excitement, with loss of voluntary muscular power, and ending in helpless unconsciousness.

4th, and final stage, where the heart begins to fail, and in which death, in extreme instances of intoxication, closes the scene.

In the first stage the temperature may rise to one-half degree Fahr. in man. In the second stage the heat comes down to its natural standard, and then declines below what is natural. During the third stage the fall in temperature rapidly increases, and, as the fourth stage is reached, it approaches a point that is actually dangerous. There is, also, during this stage, profound coma, or sleep, and, while this lasts, the temperature remains reduced. And here we have a diagnostic point between the sleep of apoplexy and the sleep of drunkenness, for in apoplexy the temperature remains normal.

These researches, although differing in results from Drs. Anstie and Dupré, would, I doubt not, have been reached by Dr. A., had not his useful life been cut short at the time it was.

Edw. H. Stimson, M.D.

Orange, Mass., Oct. 9, 1876.

BLEPHARITIS CILIARIS AND ERRORS OF REFRACTION.

To the Editor of The Medical Record.

Sir:—I am convinced, by observations made in two hundred and eighty-five cases of errors in the refraction and accommodation of the eye which I have made record of the past ten years, that the disease known as blepharitis ciliaris, or oph. tarsi, is usually accompanied with, and often wholly caused by, these errors.

Several test cases were made of patients, by giving them no other treatment than properly-fitted lenses to correct the errors. Some were hypermetropic, and others astigmatic, or both combined, and the result seems to warrant me in calling the attention of the profession to the subject.

Heretofore reliance has been placed upon local applications and digestive tonics, to the neglect of what, I am confident, is a valuable aid.

Not only have I found the local lesions cured by properly-fitted lenses, but the disturbances of digestion have also disappeared.

A case illustrative. U. B., young man from Vermont, applied for treatment, with the following symptoms: eyelids swollen; borders everted, and presenting at points pustules and accumulated crusts; eyelashes partially lost; tarsal conjunctiva congested. There was also the usual complaint of neuralgic pain about the eyes which accompanies hypermetropia, and also symptoms of indigestion—a coated tongue, eructations, unpleasant dreams, etc.

* Cantor Lectures "On Alcohol," by Dr. B. W. Richardson. Published by J. N. Stearns, Agent 58 Reade street, New York.

Examination revealed ametropia, requiring a convex lens $+\frac{1}{14}$, to correct the error of refraction.

The manifest hypermetropia was $+\frac{1}{20}$. Spectacles $+\frac{1}{20}$ were advised, with recommendation to change to $+\frac{1}{18}$, $+\frac{1}{16}$, $+\frac{1}{14}$, if tolerated.

Six months later he was well, but had not changed his first glasses. A year or more afterwards he reported that his eyes had not troubled him since three weeks after he first used his glasses.

Second case. C. D.; young lady. She had been under severe treatment for neuralgia and inflammation of the eyes, oph. tarsi, etc. Five months in a hospital, and a course of mercury, made up a part of her history.

Examination revealed astigmatism. This was corrected by proper lenses, and in a very few days she was fully relieved of all trouble.

Many other analogous cases might be selected from my record; but some of them were otherwise aided by eye salves to soothe excoriated surfaces, or, perhaps, had some constitutional treatment for complicating ailments.

The above two cases typify the others on the list, although many of them were less marked in character.

W. W. GARDNER.

SPRINGFIELD, MASS., Oct. 21, 1876.

OIL OF CORN AS A REMEDY FOR ECZEMA.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR:—Nearly one year ago a young man, resident of this city, who had long suffered severely with eczema of the fingers and hands, was induced to try the oil of corn for their relief, and was so much benefited by the first application that he continued its use, and very soon had the satisfaction of a more complete freedom from the affection than he had experienced for several years.

My observations of the action of this substance in his case and others since have persuaded me that it is a valuable medicine for the treatment of this very troublesome and obstinate disease.

The first case in which it was employed was a severe one; all of the fingers were involved in their whole circumference and the disease was deep in its action, so much so as to involve the matrix and loosen the nail on some of the fingers.

He had, on the prescriptions of physicians and others, employed remedies, usual and unusual, local and constitutional, but, in his estimation, none ever did him so much good as the oil of corn. With its use his hands soon became well, and have so remained since.

The oil thus far has been obtained in the following simple manner: A handful of grains of dry indian-corn (*zea mays;* the yellow variety has been chosen, though the white may be equally good) is placed on the blade of an ax, and a good-sized piece of iron, brought to a high degree of heat, pressed firmly on it.

The process is a slow and laborious one, as but a few drops are obtained from each handful of corn, and is caught as it flows off the edge of the ax.

On cooling it possesses near the consistence of liquid pitch and is equally black from the charring of the corn. It has a pungent odor, and the burning sensation is quite severe for a few minutes after its first application. The objectionable coloring of the hands passes away in a few days after the applications are discontinued.

Application has been made to Messrs. Powers & Weightman, Philadelphia, who will probably soon be able to furnish the oil free from the black coloring.

CHAS. E. SLOCUM.

DEFIANCE, OHIO, Oct. 2, 1876.

THE UNIVERSITY OF MICHIGAN AND THE MICHIGAN STATE SOCIETY.

TO THE EDITOR OF THE MEDICAL RECORD.

DR. JOHN P. STODDARD'S communication in your issue of 12th Aug., in reply to one from Dr. Maclean, should certainly not have been permitted to go so long unchallenged, but for the knowledge that Dr. S. had been appealed to by a member of the Judicial Council who took pains to set him (Dr. S.) right as to the matter of fact at issue between Dr. Maclean and himself, and asked Dr. S. to withdraw the misstatements contained in his letter to you. Having now waited quite long enough and in vain, for his explanation and recantation, I feel called upon to trouble you with a few words in reply to him.

As the charges under which the Michigan State Society is at present arraigned before the Judicial Council of the American Medical Association were preferred by myself, I presume Dr. S. will concede my right to speak authoritatively with regard to their aim and scope.

My colleague, Dr. Maclean, was quite correct in stating, as he did in his letter to you, that "The Michigan State Medical Society is even now under charges before the Judicial Council." These charges are based on the fact that this Society has, through a committee duly instructed for the purpose, met and consulted with the representatives of irregular systems of medicine for the avowed purpose of obtaining from the Legislature of the State an act by which *every graduate* from *regular schools*, aspiring to practise *rational medicine* in this State, would be required to pass an Examining Board, the majority of whose members were to be homœopaths and eclectics. And this committee, having so met and consulted, reported their conduct, which was approved by the Society, and a committee continued with instructions to persevere in the effort to obtain this law.

As Dr. Stoddard took an active part in the attempt to create this mixed Board of Examiners, his criticism of the present condition of affairs in the Medical Department of this University seems to me very unjust, and his advice to its much abused faculty very ungenerous.

If some one should falsely accuse Dr. Stoddard of a crime, and employ witnesses to destroy his character, and these witnesses could easily be impeached, would he have such regard for the "dignity" of silence as to leave his defence to the chance impulse of a friend, or would he defend himself?

The Michigan State Society, packed by the friends of private schools, sought to destroy the reputation of the University school by a resolution declaring its position to be inconsistent with the interest and honor of the profession.

The State Society must now choose whether it will confess this resolution to be an error, or be convicted of *intentionally* compromising the interest and honor of the profession in this State. Since, if the "existing situation of the Medical Department" of the University is inconsistent with professional honor and dignity, its own conduct must be still more so.

Very truly yours,

GEO. E. FROTHINGHAM.

ANN ARBOR, Oct. 23, 1876.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from Oct. 29th to Nov. 4th, 1876.

Edwards, L. A., Surgeon. Leave of absence further extended six months on surgeon's certificate of disability. S. O. 230, A. G. O., Nov. 3, 1876.

Jaquett, G. P., Asst. Surgeon. Assigned to duty at Edgefield, S. C. S. O. 157, Department of the South, Oct. 25, 1876.

Brown, H. E., Asst. Surgeon. Relieved from duty in Department of the South, and to report in person to Commanding General Mil. Div. of the Atlantic for assignment. S. O. 230, A. G. O., Nov. 3, 1876.

Styer, Chas., Asst. Surgeon. Leave of absence extended twenty-three days. S. O. 213, Div. of the Atlantic, Nov. 1, 1876.

Ainsworth, F. C., Asst. Surgeon. To report in person to the Commanding Officer Depart. of Arizona, for assignment to duty. S. O. 230, C. S., A. G. O.

New Instruments.

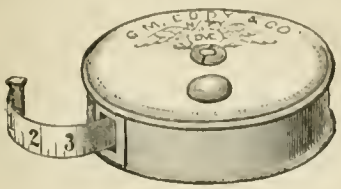
THE PLIABLE PESSARY.

The pliable ring pessary constructed by F. G. Otto & Son has some advantages over those of the hard rubber sort, which commend themselves to the attention of gynecologists. It combines softness, firmness, and smoothness, with easy and perfect flexibility on any desired plane; in fact, it can be twisted or doubled in any direction required. As will be seen by the accompanying sectional drawing, there is an explanation for this not only in the materials used, but in the methods of their adaptation to the principle involved.

The basis is a long, slender, round piece of whalebone bent up on itself many times to form a compound ring, enveloping which is a ring of spiral wire, and over the whole an envelope of rubber.

STEEL POCKET MEASURE.

G. M. Eddy & Co., of Brooklyn, N. Y., have lately manufactured a steel pocket measure which we think will prove useful to physicians. On one side of the steel ribbon the measurements are marked by English inches and on the other by French metres. The advantages of such arrangement are quite obvious to



those who may wish to become practically familiar with the decimal system. Its mechanical construction is such that it is not liable to get out of order, while its sure and easy method of working is of itself a recommendation.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending November 4, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Oct. 28	0	11	28	1	19	39	2
Nov. 4	0	17	31	1	17	40	2

Phthisis and the Babas in Servia.—When the efficacy of ordinary simples is lost, the *babas* have recourse to cabalistic science. For phthisis they take three apples, which grew on the same branch, to represent the Trinity. A knife is driven into one of these and left there twenty-four hours, and then the apple is given to the patient to eat. In desperate cases the patient is stretched on his belly on the ground, and the baba strews salt around him and then strides over him several times from right to left. She mutters at the same time formulas that are reputed to be sovereign, and makes mysterious signs.

Devotion to Science.—An American lady, by the name of Smith, proposes to bequeath her body to the Royal College of Surgeons, for anatomical purposes, after which portions of said body are to be distributed among such of her friends as may desire them.

Yellow Fever has almost disappeared in Savannah.

Honors to American Medical Men.—At a recent meeting of the Medical Society of London, Mr Wm. Adams, President, gave a detailed account of his visit to the International Medical Congress. He referred in very flattering terms to our progress in medical matters, to our medical colleges, hospitals, museums, and libraries. In speaking of American surgery, he said it was essentially the surgery of England, and, in the way of improvements in its practice, he mentioned the weight extension in fractures, giving the credit of its introduction to Drs. Gurdon Buck and H. G. Davis of this city. Before reading his address, he proposed as corresponding fellows to the Society, Professors Gross and Pancoast of Philadelphia, Professor Flint of New York, and J. K. Barnes, Surgeon-General of the United States Army.

Ventilation of the College of Physicians and Surgeons.—The ventilation in the Theatre of Anatomy of this college is so far beyond perfection that it is difficult to get out of reach of some lively current. This is particularly the case during the evening meetings of some of the medical societies.

Dr. Gurdon Buck, our distinguished townsman, has so far recovered from his recent illness as to be able to attend the hospitals and occasionally to operate. He has just published his work on Reparative Surgery; the cases detailed therein being profusely illustrated with cuts.

An Amputated and Mutilated Hand was found, a few days since, in a gutter in 26th street. It was evidently removed from a dissecting-room subject by some medical student who wished to create a sensation. It is to be hoped that the perpetrators of this piece of blackguardism will be apprehended and severely punished.

Dr. Frank H. Hamilton will hold a surgical clinic at Bellevue Hospital every Wednesday, at 2.30 P.M., during November and December.

Dr. Sayre's work on Orthopedic Surgery is to be translated into German and French.

The Mucous Membrane of the Stomach and Cerebral Lesions.—Softening and ulceration of the mucous membrane of the stomach are said by Brown-Séquard to follow injuries of the corpus striatum, the crura cerebri, or the spinal cord. On the other hand, hemorrhages generally follow injuries to that point in the pons where the middle crus cerebelli is inserted. Paralysis of vaso-motor nerves is not the cause, for there is contraction of the arteries and veins, and stasis in the capillaries which rupture.

Typhoid Fever in Paris.—When this epidemic was raging with severity last month, the readers of *La France Médicale* were furnished with a few editorial notes on the modern treatment of typhoid, especially that advocated by Liebermeister, and later by other German writers.

Attention was called to the fact that most clinical instructors recommend the use of the bath for moderating the temperature. Thus, when the fever heat has reached 107° Fahr., a bath of 68° Fahr. is to be given for from five to ten minutes, and repeated when the temperature again reached the same height.

In conjunction with the bath quinine is the great febrifuge. Twenty to twenty-five grains may be given at a dose, and even as much as forty grains within an hour. The reduction of temperature follows rapidly in most cases. It was by these two principal agents that Liebermeister reduced the ordinary percentage of mortality (27) to 8. His cases numbered 1,500. Within the past year the Germans have advocated the use of salicylic acid or the salicylate of soda, the former to be given in doses of from sixty to seventy grains. Reduction of temperature usually follows, it is said, in from three to four hours. When the salicylic acid is to be repeated, from thirty to fifty grains will usually be sufficient to promote the required reduction.

Typhoid Fever Caused by Impure Milk.—At a recent meeting of the St. Pancras (London) sanitary authorities, Dr. Stevenson reported that three cases of typhoid had occurred in well-appointed houses, situated in the Regent's Park sub-district. A searching investigation had revealed no defect in the construction of the houses, likely to explain the appearance of the malady, but he ascertained that all received their milk from one retailer. The farm supplying the milk was then inspected, and it was found that the cows had access to a pond containing crude sewage, a culvert opening into it directly, and bringing sewage from some twenty houses in the village. In the garden there was another pond of muddy water; there was also a shallow, fifteen-feet surface well, containing only a few inches of filthy water, and "from either of these sources came the water supply." The people at the farm alleged that they filtered the water, but the health officer actually saw some of the filthy water in a large milk can and also in two pails.

Thomas Laycock, the distinguished medical author, Professor of Practice of Medicine in the University of Edinburgh, and Physician to the Queen for Scotland, died Sept. 21st, in Edinburgh, aged 64 years.

Propagandism in French Hospitals.—The propagandist ardor of some of the Sisters of Charity in Paris hospitals is so pronounced as to raise the indignation of the municipal authorities.

Convalescent Home at Strassburg.—M. Ehrmann, a millionnaire of Strassburg, left a million of francs to the hospital of that city to found a convalescent home.

Butterine is the name of an artificial compound of animal fat which is sold in Glasgow, Scotland, for butter.

The Plague is said to have broken out in the Turkish army, necessitating the change of position every three days and the burning of infected tents.

The projected "City of Hygeia."—Our esteemed contemporary *The Medical Press and Circular*, does not believe that the sanitary city will be a success, but is willing to await the developments of a practical test. In regard to the project itself, it says: "We live in an age in which the experimental philosophy is being pushed to a degree of which even Bacon himself could have formed no conception. This will be really an experiment on a gigantic scale, and such as we should have expected to see projected by our American cousins rather than by our own less venturesome countrymen."

Journalistic Enterprise.—The *American Practitioner*, in a spicy editorial article on the International Medical Congress, concludes by saying:

"One reason for the marked success of the Congress was the admirably-constructed machinery; it worked perfectly. Those gentlemen in Philadelphia who had the devising and arranging of it, deserve the best professional thanks.

"Only one thing in the action of the Congress is deserving of adverse and severe criticism, and that was the resolution offered by Dr. Eve, forbidding the publication of any of its proceedings, papers, etc., in any medical journal. Dr. Eve's good nature allowed him to be imposed upon in this matter. The resolution, so it was privately whispered in Philadelphia, was offered in the interest of a medical journal whose editor had failed to have any reports prepared, when it was found other journals were having such reports in preparation. Just as soon as the matter was generally understood, there was a feeling that would have secured the reconsideration and repeal of the resolution, only it was thought best simply to let the matter pass in silence, and act as if no such resolution had ever been offered. The New York Medical Record has shown the absurdity and uselessness of this action, and it is about time that such nonsense should be stopped in intelligent medical bodies."

Original Communications.

A CONTRIBUTION TO THE STUDY OF NEURALGIA. AN INTRACTABLE CASE IN PRIVATE PRACTICE.

By E. P. HURD, M.D.,

NEWBURYPORT, MASS.

NEURALGIA, more amenable to treatment than most of the other neuroses, sometimes presents itself in a very obstinate and intractable form. The following case, occurring in private practice, illustrates the difficulties which sometimes attend the treatment of chronic and anomalous cases. It is of interest, 1st, on account of its inveteracy; 2d, on account of the violence of the pain-paroxysms; 3d, on account of the extraordinary doses of opiates and other anodynes required for the relief of the pain; 4th, as illustrative of the fact that trivial exciting causes, in a person of strongly neuralgic diathesis, are frequently sufficient to provoke an attack; 5th, as showing that neuralgia, like epilepsy, is often excited by unknown external or internal irritants, so that the *causa morbi* cannot always be foreseen and avoided; 6th, as showing that the cause is sometimes ascertainable, if not easily preventable; 7th, as showing that irritations of peripheral nerves, in neuralgia, may so exalt the excitability of certain ganglionic spinal centres as to seriously perturb all the nerves, sensory and motor, originating there—whence pain and spasm, radiating outwards, and manifested at a distance from the original neuralgic focus; 8th, as showing that pain and spasm, reflex effects just mentioned, may be so violent, so diffused, and so persistent—certain reflex vaso-motor disturbances also accompanying them—as to simulate the manifestations of spinal meningeal congestion, and lead to an erroneous diagnosis.

"Neuralgic pains are characterized by the suddenness with which they come on, and the suddenness with which they sometimes go away; by the total absence, in most cases, of heat and swelling, and often of tenderness, too, when they are external, and of febrile symptoms when they are internal, even though their intensity be extreme; by their apparent dependence, in numerous instances, on sudden changes of the weather; by their occurring chiefly in persons of a nervous temperament in whom the health is otherwise disordered."* Exemplifications of these particulars are furnished by the case I am about to report; a marked degree of tenderness, however, over the painful foci was seldom absent.

History.—The patient is a daughter of an influential gentleman of this city, whom I will call Richards—is of delicate organization, twenty-four years of age. At ten years of age an attack of measles resulted in otorrhœa and deafness. Three years later she had typhoid fever, which was followed by temporary paralysis. In 1869, an attack of dysentery added to the debility ensuing from the previous illness. Then came severe intercostal neuralgia. The attacks were frequent, and were attended with cramps of the pectoral and intercostal muscles, and when left to themselves ultimately subsided with free vomiting and exhaustion. (In fact vomiting generally ensued, whether anodyne remedies were administered or not.) The usual treatment by opiates, Indian hemp, and other narcotics was faithfully pursued. The record declares that opium failed to give much relief to the paroxysms, and that even hypodermics of morphia aggravated rather than benefited. A new remedy, the product of the guarana sorbilis, was just then coming into vogue. Dr. H. C. Perkins, the attending physician, had obtained a quantity from Brazil, and had generously furnished samples to his medical *confrères*. Some brilliant cures were wrought, and every form of neuralgia seemed to be controlled by the paullinia powders. In the case of Miss Richards, the good effects of the paullinia were especially marked. Twenty-grain doses of the powder caused speedy disappearance of the pain. Her general health improved. For four years there was almost complete immunity from pain. Last fall she was in better health than usual; appetite and digestion good; could walk and ride *ad libitum*. A visit to Boston was attended by exhaustion and a serious nervous breakdown. The following memoranda are from notes taken since my attendance:

Nov. 23, 1875.—*Present Condition of Patient.*—Miss R. is a short, fragile, undeveloped little body; weight about 75; light hair, blue eyes; thin and pale; quite deaf; teeth all decayed; digestive functions, menstruation, normal; regular but weak and compressible pulse, 120; no febrile action. An attack of spasmodic asthma. Prescribed bromide potas. with belladonna; stramonium cigarettes to be smoked. Relief followed in a few hours.

I remarked on this occasion the exceeding good health of the parents. Neither father nor mother are "nervous" people. The former has a chronic bronchial trouble and rheumatic proclivities, but, though past sixty, is quite vigorous.

Dec. 8.—An attack of pain in left shoulder. In bed, sitting posture, father supporting and making pressure on the painful shoulder—pressure affording some relief.

A full dose of paullinia was given, but without effect. It was twice repeated within an hour and a half, and failed. And here it would be proper to remark that paullinia has never since been of any benefit. I injected hypodermically ¼ gr. morph., without effect. Another hypodermic, repeated in an hour, failed. Subsequent inhalation of chloroform caused a lull, and after free vomiting, she fell asleep.

Jan. 13, 1876.—Was summoned at ten o'clock P.M. The pain had returned in the left shoulder. Patient sitting up in bed, writhing with pain. "O dear! O dear!" was the constant, pitiful cry. Pulse 130, extremities cold, countenance distressful; shoulder drawn up by a tetanoid contraction of scapular muscles. Sometimes a wave of pain would attack intercostals of left side, and the clonic muscular spasms could be seen and felt. Hyperæsthesia of left shoulder and scapular region, and tender spots along the cervical spine; the *points douloureux*, however, were not significant, nor were they those that Valleix describes when treating the neuralgic affections of these regions. Two hypodermics of morphia, fifteen minutes apart, ½ gr. each, served but to intensify the pain and spasm. Squibb's ether was administered for forty minutes without causing muscular relaxation, or relieving the pain. Chloroform finally brought rest, but no amount of this anæsthetic then or ever produced unconsciousness, if I except momentary lapses into sleep from which *a touch* was sufficient to arouse her.

* Allison's Outlines, as quoted by Watson. The same writer adds: "This cruel malady occurs most commonly in persons who exhibit in other respects the signs of an unsound or deranged or debilitated system . . . Sometimes it is connected with a disposition to rheumatic affections."

Jan. 14.—On making my morning visit. I found that there had been a return of pain during the night—this finally had given way to prolonged vomiting. There was hebetude and prostration; irritable stomach, muscular soreness, extreme hyperæsthesia of left shoulder, which was still drawn up and made to hug the neck. Here evidently was hyper-irritability of a very limited nerve tract. Was it in some peripheral (cutaneous) branches, and therefore probably of rheumatic origin (a quite tenable hypothesis), or in the posterior roots of some larger nerve trunk whose molecular disturbances were propagated centrically and excentrically? The latter hypothesis would very well explain the symptoms, and be quite in keeping with Anstie's theory that neuralgia is the result of atrophic or degenerative changes in the roots of sensory nerves.*

Adopting this view, it would seem likely that the rhomboid branch of the fifth cervical might be the nerve principally at fault, and that the irritation might start from a sensory root of that nerve. The pain would be referred to the peripheral terminal branches of the nerve, in accordance with a well-known physiological law. The molecular disturbance, when intense, would be propagated in various directions, along lines of least resistance, and hence the spasm, the intercostal pain, etc. After all, I have been led to prefer the theory that the irritation giving rise to such painful manifestations starts invariably from the periphery—certain cutaneous branches whose anatomical elements, of low vitality, are wont to be injuriously affected by atmospheric changes (dampness, chilliness); by the systemic blood containing a pabulum insufficiently elaborated, or an excess of urea, uric, lactic, etc.; by physical violence, as when severe pain has been brought on by handling the arm a little too roughly or by an unlucky hit on the shoulder.†

Reasons will be given further on in support of this opinion. It is easy to understand that an irritation proceeding from the surface can do all that an irritation of centric origin can do. Moreover, the condition of the posterior roots that Anstie describes has not been proved to be a common concomitant of neuralgia. Nor is it easy to see the connection between such atrophy and the intense pain characterizing neuralgia, especially when it is taken into account that *atrophies*, not only of nerve-trunks, but of large masses of nerve-trunks in the spinal cord and in the encephalon, have been found after death, and yet pain was not a prominent symptom during the life of individuals suffering these degenerative changes.*

The hyperæsthesia is *exalted polarity;* this hyperæsthesia *intensified* is pain.†

To return to my report. The irritable stomach was first quieted, then bromide potas., in one scruple doses, was prescribed, also the sub. carb. iron in half-teaspoonful doses ter die. Wine and brandy *ad lib.*

Jan. 15.—Another attack of pain. This time it was the right shoulder that was affected. The left shoulder, still fixed in its unnatural position. The same writhings and outcries as before. A hypodermic of atropia $\frac{1}{75}$ gr. was given. The paroxysm passed off in a few minutes. The pain returned in an hour, to be again controlled by the atropia.

Jan. 16.—Prostration, hebetude, muscular soreness, anorexia, deformity of left shoulder very marked. Atropia, $\frac{1}{100}$ gr., to be given night and morning. Pancreatic emulsion after each meal. Bromide potas. mixture to be dropped, and bromide camphor given instead. (This soon had to be omitted as not agreeing.) Bowels constipated, owing probably to the large quantity of sub. carb. iron that was taken. Elix. laxative administered. Quinine in two gr. doses, instead of the iron powder.

From this time to the 23d there was no attack of any severity. Appetite became good. Scraped beef given; also eggs, milk, cream, oysters, custards, etc. (Want of teeth compels great care in the preparation of the food.) Nocturnal restlessness subdued by chloral in 10 gr. doses. On the 19th there was a return of pain, owing to hurting the left shoulder in moving her. It was subdued by two doses of chloral. Atropia was discontinued, not seeming to do any good. The emulsion was also dropped, as interfering with appetite, and a little salad oil was given instead. The soreness, debility, and tetany continued.

Jan. 23*d*, 24*th*, 25*th*.—Two very severe attacks of pain in right shoulder and side. Pain ingravescent. Comes on with slight twinges, relieved by pressure over the seat of pain; then there is a steady ache—then the storm is at its height. She sits up now in bed, though previously unable to move unless helped; the body sways to-and-fro, there are groans and loud outcries. Pain now in the shoulder, now in the right side, now in the left, and now in the back. Pain a constant heavy *thud*, aggravated by lancinating *thrusts*. The description of Jaccoud is strikingly *à propos* of our patient's condition during the attack: "Indépendamment des secousses lancinantes du paroxysme, les malades éprouvent une douleur *fixe*, ou *diffuse*, profonde et contusive, qui n'est point comparable à la première par son intensité, et qui survit pendant un temps variable à la terminaison de l'accès proprement dit."‡

During these two attacks everything seemed to fail, till the pain wore itself out. Atropia failed, so did morphia, so chlorodyne (Sir Thomas Browne's preparation), given in half-teaspoonful doses. Chloroform inhalations gave only momentary relief, though fully half a pound was used. After an hour of almost continuous administration of this anæsthetic by inhalation, the patient was still conscious, and not wholly relieved of pain and spasm.

Jan. 26*th*.—I rubbed croton-oil liniment along the lower cervical and upper dorsal regions of the spine.

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* Anstie on Neuralgia. Philad.: Lindsay & Blakiston.

† "The (peripheral) afferent nerves of individuals, who, though otherwise healthy, have lax tissues, are often unduly impressible."—Herbert Spencer's Prin. Psychology, p. 70, vol. i. The above gives us a hint as to the pathology of this case. The ultimate peripheral termination of sensory nerves is the naked axis cylinder. Hence the terminations of the nerves are more exposed to disturbances and irritants of all kinds than are the nerve-trunks, or the posterior roots. In persons of low vitality and lax tissues, an extraordinary amount of change may be produced in nerves and nerve-centres by irritants that are trivial. The nerve molecules easily tumble to pieces, the least shock producing disintegration, instead of that moderate isomeric transformation which is normal. In undergoing disintegration they liberate all their contained motion, and speedily the whole nerve and its central ganglia are thrown into commotion. There is now riot and disorder, as much as in an epileptic convulsion.

This explanation makes the neuralgic attack literally a species of prolonged explosion, the unstable protoplasm of the axis cylinder being the *powder*, and some local, constitutional or external irritant the *spark*. The indication for treatment is, of course, to fortify and harden the constitution by a suitable invigorating nutrient and tonic regimen. The nervous system will participate in the benefit thus derived. Hence alcoholics, quinine, arsenic, iron, fats, etc., might be expected to do good. A better and more enduring protoplasm is wanted. Unfortunately, it is often easier to tell what is wanted than to carry out the treatment necessary. Neuralgia, a disease of civilization, would undoubtedly be stamped out by a return to savagism.

* Erb, in Ziemssen's Cyclopædia. For examples, see Vulpian "Leçons sur la Physiologie Comparée du Syst. Nerv."

† Jaccoud, Pathologie Interne, Paris, 1875, vol. i. p. 481. "Une hyperæsthésie morbide élevée à la puissance de la douleur spontanée, constitue toutes les névralgies."

‡ Jaccoud, Op. cit., tome I., p. 486.

The following pill to be given three times a day: R Quevenne's iron, gr. ij.; Ext. Cannabis Ind., gr. ½. M. Ft. pil.

Jan. 27th.—A slight attack of intercostal pain was relieved by firm pressure with the hand. Pressure has often seemed to abort pain in the side and shoulder. (I except the sensitive left shoulder, which cannot be handled—it is a *noli me tangere.*)* Another proof that the pain is of peripheral origin; else how could pressure modify a painful consciousness in nerve filaments that do not themselves originate the morbid disturbance?

March 9th, evening.—There has not been any attack of any severity since Jan. 25th. Premonitions have been promptly attended to; chloral proving of great service as a preventive. Croton chloral has of late been given instead of the hydrate, as being more pleasant to take.† The effects seem to be identical with those of the hydrate.

Is the good result in any measure attributable to the croton oil pustulation on the back? Theoretically, one would expect benefit from severe counter-irritation in such cases.

March 9th, evening.—A very severe attack (intercostal). Croton chloral in repeated 5 gr. doses failed. ⅛th gr. atropia with 1 gr. morphia, subcutaneously, relieved after several hours' torture.

March 10th.—Pain in side and shoulder. Another hypodermic of morphia, modified by atropia; relief. Stomach irritable; vital functions all depressed. To live on milk, and discontinue all medication.

March 18th.—Another paroxysm, relieved as before. Patient looks pinched; is of leaden hue; pulse, 130; breath very offensive; in fact, all the secretions are depraved, a result probably of reflex vaso-motor disturbances, so often remarked in neuralgias. The perspiration after an attack often has a rank smell, and the urine is wine-colored, and loaded with urates and phosphates.

April 13th.—Almost a month of lull. Pain has been prevented—"nipped in the bud"—by the vigilance of the attendants, the parents and sisters of the patient. Room has been kept, as far as possible, at one uniform temperature (70° F.) By flannel clothing, frictions, stimulating and anodyne embrocations, care as to diet (which has consisted largely of milk, with porridge, Graham bread, beef pulp and beef juice, wine and egg), by the judicious use of croton chloral and valerian, the sick girl has been made as comfortable as possible. To-day there has been a violent outbreak of pain and spasm. The morphia and atropia failed. One drachm and a half of McMunn's elix. of opium was introduced subcutaneously in the neighborhood of the left shoulder, the pain being most violent there. These injections were made at intervals of fifteen minutes, three in number, and sufficed to quell the storm. The pain was of the character before described.

April 14th.—Return of pain, in both sides and shoulders (*i. e.*, leaping from one part to another). Marked spasm of pectorals, intercostals, and occasionally of diaphragm. Some opisthotonos, which I judged to be mostly voluntary, induced in order to relieve the pain in the shoulders and the scapular regions. Hiccough and difficult deglutition, from reflex disturbances of constrictor muscles and diaphragm. (It is a little singular that the nerves of the brachial plexuses seem to have escaped in all these attacks.) The pulse and breathing were accelerated, and there was considerable feverish heat (101–102 F.) Headache, with vertigo.

Have we here a case of meningeal congestion, bordering on inflammation, or may it be possible that these recent exacerbations, with fever, opisthotonos, severe clonic spasms, etc., are the result of the heroic doses that have been given of elix. of opium to relieve the pain? I confess to having yielded to the persuasion that I had here a case of meningeal congestion—my former diagnosis of neuralgia having been incorrect! Dr. Howe, who saw the young lady with me, coincided in this view. Later, however, we saw reason to change our mind. Ergot and brom. pot. was prescribed; counter-irritation by croton oil over spine (blisters were contra-indicated by the dorsal decubitus of patient), and hypodermics of McMunn or Battley, *pro re nata.*

April 17th.—Another "fearful" day. Pain and spasm in most of the voluntary muscles supplied by the lower cervical and upper dorsal nerves. Four hypodermics of McMunn, at intervals of half an hour, were injected into the left deltoid.* A stupor, lasting twelve hours, ensued.

During the attack all the members were at times convulsed, and the backward bending of the body was very marked. Difficult deglutition, weak, rapid pulse; rapid, sometimes sighing respiration. When free from pain, complete prostration; headache, stupor, pallor, sometimes alarming lividity of countenance, coldness of extremities—in fact, death at times seemed imminent.

April 18th.—Ol. tiglii over spine, from occiput to lumbar region.

April 19th.—Another severe attack of pain, which was relieved by McMunn. The croton oil is causing much suffering.

May 24th.—There has been no return of pain to date. The effect of the croton oil application has been severe, but apparently beneficial. What is its *modus operandi?* Has it acted as a persistent, powerful stimulus to the trophic spinal centres of the diseased sensory nerves? †

For about a fortnight one of the morphia suppositories of the U. S. P. was used every night. Then a 3 gr. hyoscyamus pill was substituted, with equally good results. An occasional dose of chloral or valerian. Neurotics seemed now to have their ordinary effect, as when administered to patients generally. Diet largely nitrogenous, with milk, cream, wine, etc. There was gradual subsidence of muscular soreness; the left shoulder by degrees became less irritable, and went back to its place. At the date last given, Miss R. could sit up for hours; appetite and sleep were good. To no particular medication could this good result be attributed. In fact, it is impossible to say that desperate attempts, at different times made, to bring relief to the agonizing pain, may not have done this poor girl harm. Yet it is hard to sit and fold the hands, and make no effort to relieve intense suffering. It is hard for the sympathizing physician to say, "I can do nothing." The change of weather, from the

* Pressure in these cases seems to act by abolishing the conductivity of the sensory nerves. "We are able to understand how pressure, by deranging that delicate molecular balance which makes possible the alternation of isomeric states, may prevent the passage of nervous discharges."—Herbert Spencer's Principles of Psychology, vol. 1, p. 77.

† ℞ Croton chloral ..... ʒ ij.
Glycerine,
Syrup Aurantii..... .... ♏ xl.
M
S. gr. ij. *pro re nata.*

* No abscess followed these injections, though considerable cellular cutaneous inflammation supervened.

† These are believed to be the ganglia of the posterior roots.—See Vulpian, op. cit.

cold of winter to the genial warmth of spring, would naturally contribute toward recovery.

June 30th.—There has as yet been no relapse. Miss R. is now able to sit up all day; has been down stairs; in fact, takes her meals with the family. Little medicine is taken; much porter and wine. Has gained in flesh. Functions regular.

July 10th.—A very severe attack, confined principally to the right side and shoulder. I was present from 8 A.M. till nearly noon. Three subcutaneous injections of Battley's sedative solution failed to give relief. What they did do was to cause fever, thirst, headache, stupor, finally delirium, lasting several hours.

July 11th.—More or less vomiting all night. Stomach still irritable. Headache and mental confusion. Pain at times very severe in the side. Hydrate chloral, with bromid. potas. was given in large, frequent doses, by enema, with starch. This eventually quelled the pain. I resolved never to give opium, in any shape, to this patient again.

July 12th, evening.—I had tried so many things by hypodermic injection, that I resolved, if another severe paroxysm should occur, to inject three syringefuls of a saturated solution of bromide potassium, expecting to see its sedative effects manifested more speedily and more thoroughly. Accordingly, on a return of the pain in left shoulder this evening, I carried out my resolution. Never was poor mortal more disappointed in an expected result. Agonizing pain followed in the point of puncture. The pain in shoulder was lost in the intenser pain in the back of right forearm, where the prick of the hypodermic needle was made. After hours of suffering, worn out, the poor girl fell asleep.

July 20th.—That arm has proved a serious trouble. Almost constant pain has been felt in the point where the bromide was injected, and a new focus of neuralgia has evidently been generated.* There has been no pain of any account elsewhere. The whole of the forearm, moreover, is swollen, and the swelling has pointed in the middle of the back of the forearm, near the site of the unlucky puncture. The indications of a formation of pus are plain enough. Poultices have been used for several days.

July 21st.—Opened the abscess in back of forearm; though there was a considerable flow of matter, the pain was not much relieved.

I was perplexed at the result of the bromide injection, and tried three syringefuls of the same on myself, one night on going to bed. There was excessive pain for a few minutes at the seat of puncture, till the drug was all absorbed; then a sleep of extraordinary soundness followed, vomiting ensuing on waking. The arm felt the next day as it usually does after the puncture of the hypodermic needle; no inflammation followed. There is no doubt that, in the case of my patient, the drachm of bromide solution injected was all absorbed in less than half an hour. Whence, then, the pain and other after bad effects? I think we can understand them only on the supposition that some injury was done by the needle to the terminal filaments of certain sensory nerves. The neuritis resulting by reflex action caused profound nutritive disturbances in the surrounding textures; there was a free migration of germinal cells to the part, and eventually an abundant pus formation. But why did this never occur before? *Nescio.*

* Jaccoud mentions (op. cit.) that severe neuralgia has followed the puncture of a lancet in venesection. Erb, in Ziemssen, alludes to facts of like nature.

July 30.—The swelling has mostly left the arm; there is now but little purulent discharge, but there are frequent paroxysms of pain, lasting for hours—sometimes all night. *This pain is mostly in the arm and about the puncture.* The arm continues disabled, and hyperæsthesia is marked over the region of pain. Morphia in ointment (3 j. to the 3 j. of cerate) has seemed to afford great relief; so also has belladonna extract, beaten up with water and applied in the form of a poultice.

She has been taking the past week the following prescription:

℞ Tinct. fer. mur. ..... 3 ij.
Bromide pot. ..... ss.
Water ..... ℥ vj.
M.
Sig.—A tablespoonful three times a day.

Aug. 30th.—The condition of Miss R. for the past month has been slowly improving; no violent attacks of pain. The arm is getting better, yet it is subject to brief attacks of pain at the place of puncture. Pain in the left shoulder has once or twice been awakened by an attempt to use the arm, or by hurting the shoulder when moving her. She is now able to sit up several hours each day, and has recovered her habits of sleep.

Sept. 5th.—I have only to add that several attacks of pain have apparently been warded off by a resort to a saturated tincture of gelseminum, in half-teaspoonful doses, till the physiological effects of the drug on the eyes and head have been experienced. Sometimes the external application of the tincture to the side has been sufficient.

I ought to add a word respecting the remarkable tolerance of narcotics and anæsthetics evinced during the neuralgic paroxysms. So far these paroxysms have their analogue in an ordinary case of tetanus. When any one can explain why, in tetanus, an irritation springing from a peripheral nerve, or nerves (as of the sensory nerves of the fingers or toes in frost-bite, lacerated wounds, etc.), can so agitate the whole spinal nervous system as to cause motor disturbances that are but little influenced by the most powerful remedial agents, one can explain why peripheral irritations of a *less high and persistent grade* (as in the case above recorded) resist large doses of opium and anæsthetics. Chloral, which so wonderfully mitigates the violence of traumatic tetanus, and which, in a severe case of hydrophobia which lately occurred in this vicinity, gave much relief when all other means failed, might be expected to do good in neuralgia characterized by the tetanoid element (hyperæsthesia, local spasm, tetany of the shoulder, etc., as illustrated in my report). Unfortunately, however, the large doses that are necessary to control the paroxysms are not tolerated by our patient's stomach (irritable at such times), and the hypodermic method of introducing the remedy into the circulation, considering my late unfortunate experience with the potassium bromide, I shall not be in any haste to try.

Oct. 21st.—Since the foregoing article was written, several opportunities have occurred for testing the remedial powers of the tincture of gelseminum in this case. So far the experiment has been satisfactory. The pain and spasm seem to be controlled by the remedy. Half-drachm doses proved to be more than was necessary—pain was relieved, but headache and disturbed vision followed. Ten, and even *five*-drop doses have proved to be enough to promptly arrest incipient attacks. No unpleasant effects have followed the smaller doses. It is not, however, positively known whether the incipient attacks, thus promptly cut short,

would have merged into the more violent paroxysms that have hitherto so often defied treatment. Certainly no opportunity has yet occurred of trying the gelseminum under *the most* unfavorable circumstances. The presumption, however, is (and I am sustained by the opinion of the father of the young lady, a man of rare judgment and discernment) that the *minor* attacks would very soon have led to the *severer*, and that the gelseminum has proved of rare utility.

With the cessation of pain, Miss R. has greatly improved in health, and the hyperæsthesia of the left shoulder is less marked than it has been for many months. She can now use the left arm a little, but the right arm and hand are still disabled; the condition of the latter is slowly improving under the use of hot salt-water baths. She sits up nearly all day, and has resumed her place in the family circle.

SYPHILIS OF THE COCHLEA (COCHLITIS?).

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Some three years and a half since, in writing upon diseases of the labyrinth, I stated that I had yet to see a case of recovery from syphilitic disease of that part of the ear.* Since that time I have reported one case of cure of syphilis of the cochlea by the use of mercury and potash.† I have also very lately seen a similar case in which very great improvement has resulted from an anti-syphilitic treatment—so great an one, that we may hope for much more, since the case has been under treatment but a month. These cases have of course made me more hopeful as to the prognosis of syphilitic disease of the labyrinth. They, with some others that I will now report, have also assisted me to a clearer idea of the symptoms and nature of the disease, although much remains that is unpleasantly obscure, especially as to the pathology. This much is certain, however: the clinical investigation of recent cases will aid us very much in determining just how to distinguish diseases of the labyrinth from those of the middle ear, and perhaps to go a step farther, and locate them in the vestibule, semicircular canals, or cochlea. I beg therefore to again report the outline of the first case alluded to, with the additional ones. Before doing so, the symptoms that may be somewhat relied upon in making a diagnosis of disease of the cochlea and of the other parts of the labyrinth will be tabulated.

1. Disease of the cochlea, as of the other parts of the labyrinth, usually, although not always, manifests itself suddenly. The patient can definitely fix upon a time when he became deaf, and when he began to have *tinnitus aurium*. This is true even when one side only is affected. The one-sided deafness would not be so quickly recognized were it not usually accompanied by tinnitus, vertigo, and often by unsteadiness of gait. Sudden loss of hearing and the sudden occurrence of tinnitus, vertigo, and staggering, are not, however, entirely peculiar to labyrinth disease, since it is well known that we sometimes, although rarely, have the same symptoms in cases of inspissated cerumen and catarrh of the middle ear. They are therefore only of pathognomonic value in connection with the objective examination and tests.

2. The tuning fork is usually heard better or only in the sound or better ear. This would be a much more valuable test were the average powers of exact and objective examination better than we find them among our patients. The value of the tuning-fork is impaired by the willingness of even intelligent patients to believe that they hear all kinds of sounds, no matter how produced, better with the better ear. Then again, if both ears be affected, to nearly the same degree, the test has an extremely limited value.

3. The examination of the membrana tympani and the employment of the methods for inflating the middle ear, will usually give us reasonable conclusions as to the situation of a given disease of the ear, so that at the least we may exclude collections of fluid in the tympanic cavity in making a differential diagnosis between disease of the middle ear and of the labyrinth.

4. The piano, or any very similar musical instrument, will aid us in determining whether or not disease of the cochlea exists. The examination of cases that were unquestionably affections of the labyrinth shows that the power of appreciating low tones is the last to suffer, and the first to recover in most cases of disease of this part of the ear, so that these will be heard when the high ones are not heard at all, or if they are appreciated, they appear "*false*" or doubled. From our present knowledge of the physiology of hearing, when these symptoms are present, we must conclude that the cochlea is the seat of disease, even if it be secondarily affected.

5. The diagnosis of *syphilis* of the labyrinth depends in a great measure upon the same kind of evidence as that from which we conclude that a case of optic neuritis or choroiditis is syphilitic; that is to say, the history and the presence of other symptoms are eruption, mucous patches, etc. It should not be forgotten, however, that the occurrence of labyrinth disease, in a person who has probably had the initial lesion of syphilis, even if no other symptoms are present, is a very suspicious circumstance which should lead to a careful weighing of the indications for and against a mercurial treatment.

I prefer to say disease of the cochlea, instead of disease of the labyrinth, when the prominent symptoms, as in the cases now reported, are great impairment of hearing, the inability to hear certain tones, and the production of false ones. These are evidences, I think, of cochlear disease, whatever else we may have. Tinnitus is a symptom common to many forms of aural affections, while vertigo and unsteadiness of gait are chiefly to be referred to undue pressure from the base of the stapes upon the semicircular canals, and not to disease of the cochlea. I think too much stress has been laid upon increased pressure upon this latter named part of the ear, to the neglect of disease having its origin in the tone-perceiving apparatus—the cochlea. "Ménière's disease" has always seemed to me an unfortunate name, since it has been indiscriminately applied. It ought not to be used unless it refers to a case such as that in which a hemorrhage into the semi-circular canals was found. Of late, cases in which the cochlear symptoms are, at least, the predominant ones, are sometimes styled cases of "Ménière's disease," when they have very little in common with cases of hemorrhage. In short, I think we should, in making a diagnosis, begin to localize the part of the ear that is chiefly affected. It is interesting to notice that we are always assisted in a diagnosis of supposed cochlear disease, if the patient have a musical education. I believe all the cases of double hearing that have been reported occurred in musicians. Certainly other patients have had the same symptoms, but they have been unable to

* Treatise on Diseases of the Ear, p. 564.
† Archives of Dermatology, vol. I., part III.

appreciate them. The power of hearing certain tones can, however, be accurately tested in all patients except young children.

Case I.—W. M., æt. 37. The patient states that five weeks ago, on one particular day, he observed that his hearing was impaired and that he had a noise in his ears. From that time to this he has grown worse. He also states that his hearing is worse at night. About six months ago he had a chancre; three months later he had alopecia; and there is now a copper-colored papular eruption upon his wrists and arms.

Hearing distance: R. $\frac{0}{40}$, L. $\frac{\text{Laid}}{40}$.

The tuning-fork is heard better in the *left* ear. The pharynx is granular and in a hypersecretive condition. The drum-heads both show small light spots. The usual treatment for catarrh of the middle ears has been employed since the attack of tinnitus and the loss of hearing, but without success.

The patient was immediately placed upon anti-syphilitic treatment, which he carried out with but moderate faithfulness, but he began at once to improve. Two months after his tinnitus was relieved, and the hearing distance was: R. $\frac{\text{Pressed}}{40}$, L. $\frac{6}{40}$. After this he went under the care of Dr. Sturgis for other symptoms of syphilis, and he informed me that he heard very well.

Case II.—Mrs. X., æt. 31. April 8, 1875. Seven weeks ago this patient, who was brought to me by her husband, a physician, began to observe an impairment of hearing, accompanied by a dull pain and by tinnitus.

Hearing distance: R. $\frac{0}{40}$, L. $\frac{1}{40}$.

The husband, and the note of a physician who had supervised the treatment of the patient, state that she had not been well since the birth of her child in August last, when an abrasion (syphilitic?) was found on the *os uteri*. This the husband says was probably produced by infection from his own finger, upon which was the initial lesion of syphilis, contracted in attending a case of labor in a syphilitic patient.

The symptoms from which Mrs. X. suffered before the loss of hearing were neuralgic pains about the eyes, hyperæmia of the optic discs, papular eruption on the chest, and alopecia. There are now traces of the eruption, and the patient has a poor appetite, pains in her legs, and some neuralgia about the eyes. The treatment was anti-syphilitic in the beginning, but has not been very thoroughly carried out of late. The pharynx is granular, and the left drum has no light spot. The usual treatment for catarrh of the middle ears has been pursued to some extent, but with no benefit, for the aural symptoms are increasing.

A thorough anti-syphilitic treatment was undertaken, and, according to a note from the husband and a verbal communication from the physician who first observed the case, the patient progressed steadily to recovery under this management. I have not seen her since she first consulted me.

Case III.—Mr. U., æt. 33. August 30, 1876. The patient states that towards the end of last June he observed dulness of hearing and tinnitus in both ears. Soon after he discovered that he was totally deaf as to the left ear, and the right ear has been growing gradually worse.

On August 1st he began to have attacks of vertigo and staggering, and has had several since. He had a venereal sore on his penis about February 15th, and says he had mucous patches in his mouth and throat about the middle of March.

Hearing distance: R. $\frac{0}{40}$, L. $\frac{0}{40}$.

He hears words when spoken distinctly *into* the right ear. The drum-heads are both dull in color and have no light spots. The air enters both tympanic cavities freely upon the employment of Politzer's method, and reddens the drum-heads, but causes no improvement in hearing.

A diagnosis of syphilitic disease of the labyrinth on both sides was made by my associate, Dr. E. T. Ely, who saw him first; and after the patient had seen Dr. E. L. Keyes in consultation, he was put upon a course of inunction with the oleate of mercury, mercurial baths, and iodide of potassium internally, in steadily increasing doses.

On September 9th, he was already better. He could hear the voice much better; the attacks of vertigo continued, but there was no more staggering.

A more complete examination showed some peculiar symptoms which throw some light upon disease of the cochlea, and which are therefore now detailed. The noises of the street *jar* the patient's head very unpleasantly. He cannot distinguish sibilants—*s* sounds like *f*, etc. The notes of the piano become discordant at 5th C. They do not sound *double*, but *false*. In the higher notes the 7th note sounds more like the octave than the octave itself.

September 12th.—There is a little more improvement in the hearing. He hears notes truly about an octave higher than on the 9th. When an upper note is struck he also hears with this the half-note above. He still complains of the unpleasant effect of the noisy streets. The drugs have been steadily continued, and with no unpleasant effects. He is allowed to leave New York and go to the sea-side.

September 19th.—Patient now hears conversation with the right ear at ten feet. The left ear seems to have no power whatever. The dose of potash has now reached seventy-five grains three times a day.

October 5th.—Hears the voice at twenty feet with ease. All but the last two notes of the piano are heard correctly. *F* still sounds like *s*. Is taking one hundred and twenty grains potash three times a day. The history rests here for the present.

It is possible that we have not paid enough attention to the protection of inflamed or hyperæmic ears. As has been shown,* boiler-makers may protect their ears from the destructive hyperæmia caused by the concussions to which their work exposes them, by plugging the meatus; and telegraph-operators may suffer from an impairment of hearing induced by exposure to the continuous clicking of a telegraph instrument. In the case just reported, the patient experienced great relief from the change of residence from near the noisy pavements of New York to the quiet of the sea-side; and I believe where noise produces such a degree of irritation as was complained of in this case, we should carefully select a residence for the patient with a view to keeping him out of noise. In ophthalmic therapeutics a great deal of care is often necessary to protect the eyes from the light; and in acute aural disease, and perhaps in some forms of chronic affections, the same care should be exercised lest the ears be exposed to loud or continuous sounds.

Case IV. is one that I saw at the Manhattan Eye and Ear Hospital, through Dr. E. T. Ely, who had charge of the patient at the Eastern Dispensary, and who diagnosticated disease of the labyrinth. Mr. L., æt. 22. September 7, 1876. Complains that two days ago he was suddenly attacked by complete deaf-

* American Journal of the Medical Sciences, vol. lxviii., p. 377.

ness in the left ear, accompanied by noises like "the blowing off of steam." These symptoms have continued, and he has also had slight vertigo and feeling of unsteadiness—most troublesome when he turns his face upwards. He had a venereal sore on penis two years ago, and subsequently sore mouth, falling of his hair, and iritis. Was treated for syphilis by reputable physicians.

Hearing distance: R. $\frac{10}{40}$, L. $\frac{0}{40}$. Tuning-fork heard only on right side. Drum-heads somewhat sunken, with dull color and dull light spot. Air enters middle ears readily through Eustachian tubes, but does not improve hearing.

September 20th.—Patient has been treated for catarrh of the middle ears, without any benefit. Anti-syphilitic treatment was advised at his first visit, but he has refused it thus far.

The diagnosis in this case has not been subjected to the crucial test of treatment. Its syphilitic character cannot therefore be so strongly emphasized. Yet when a history of general syphilis is so distinct and a labyrinth affection occurs, I think we may safely conclude that the latter is at least *modified* by the venereal poison, if not actually caused by it.

It is undoubtedly true that affections occur in syphilitic patients (from suppression of the perspiration, for example) which would have occurred all the same had they not been syphilitic; and yet the exposure or imprudence having once caused the attack of inflammation, it immediately assumes the character of a syphilitic affection by reason of the syphilitic blood, whose increased flow to the part and the exudation go to constitute the inflammation. The complete failure of the anti-catarrhal treatment, although all these patients showed some catarrhal symptoms, was another striking evidence of the real nature of the cases; for we seldom meet with cases of catarrh that do not respond to some extent to the use of the catheter, Politzer's method, etc., while, in acute or sub-acute labyrinth diseases, this treatment often aggravates the symptoms.

We do not know as yet what part of the cochlea corresponds to the low, and what part to the high notes of a musical instrument; but we do know, as has been intimated in a preceding part of this article, from what has been seen of diseases of the labyrinth—not only in such cases as those just given, but in those resulting from cerebro-spinal meningitis—that the parts tuned for low tones suffer less than the others. The former will remain unhurt, or at least with a certain power of perceiving sound, when the latter have no power at all. I have now a patient under observation, however, who seems to have labyrinth disease secondary to a catarrhal affection of the middle ears, who presents some symptoms that seem to contradict this view. With the right ear—the one in which I think the nerve is diseased—he can hear the high notes of a piano better than the low ones; in walking on the sea-shore he hears the crickets in the grass, but not the roar of the waves; he can hear the chirping of insects and the movements of their bodies easily; the tick of a watch is heard normally $\frac{4}{40}$, and yet he cannot hear the tones of the human voice at all well. With the left ear, whose hearing distance for the watch is but $\frac{1}{40}$, the power of hearing conversation is so good that the patient, a young man of seventeen, carries on his studies at college with no particular difficulty.

These clinical facts may yet be fully explained by the physicist working with musical instruments; at least, as soon as the pathologist has determined the exact nature of the diseases of the cochlea.

Progress of Medical Science.

Retropharyngeal Abscesses in Children.—The *Jahrbuch für Kinderheilkunde* contains a paper by Prof. Bókai, of Pesth, on this subject, based on 144 cases of the disease observed and treated by him in the Children's Hospital at Pesth, between the years 1854 and 1876. Of these cases 129 were idiopathic; 3 were secondary to abscesses in the neck; 4 were secondary to spondylitis cervicalis; 7 occurred during the course of scarlet fever, and ought properly to be classed with the idiopathic cases, as the anatomical processes in both were the same; and finally, 1 was of traumatic origin. In addition to these, he observed 43 cases of lymphadenitis retropharyngealis, which he classes with the idiopathic retropharyngeal abscesses, because he believes that the latter always result from the former. Formerly he believed that catarrhal pharyngitis was the cause of retropharyngeal abscess, but his observations convinced him many years ago that the abscess was always developed from a lymphadenitis retropharyngealis. The existence of several small lymphatic glands in the retropharyngeal connective tissue has been demonstrated by Hyrtl, Luschka, Henle, and other anatomists. In 30 autopsies of children made by Dr. Dollinger at the Children's Hospital in Pesth, the deep cervical glands were found, as described by Henle, to be from the size of a millet-seed to that of a pea, in 20 cases; in 7 cases, in which death had occurred from catarrhal pneumonia, they were from the size of a bean to that of a hazelnut, but unchanged in structure; in the three other cases they were cheesy. Prof. Bókai has frequently been able to observe idiopathic retropharyngeal abscesses in all the stages of their development. In these cases he always found at first a firm tumor, as large as a hazelnut or a pigeon's egg, behind one or other tonsil, rarely in the middle of the retropharyngeal space. These tumors could be felt externally by deep pressure near the angle of the jaw. Later on, they became soft and elastic, fluctuated, and gave exit to pus when opened. The secondary retropharyngeal abscesses, which are due to burrowing of pus from abscesses in the external parts of the neck, and also those which are due to disease of the vertebræ, are comparatively rare. It must be remembered, however, that a considerable number of the retropharyngeal abscesses in scrofulous children, though accompanied by suppuration of the superficial glands, are really idiopathic, and not due to burrowing of pus. The retropharyngeal abscesses that complicate scarlet fever are also due to lymphadenitis, and only differ from the idiopathic abscesses when septicæmia sets in in the course of a scarlatina diphtheritica.

The affection is met with about as often in girls as in boys. It is most frequent during the first three years of life; after the third year it rarely occurs. It occurs less frequently in summer than in the other seasons of the year, and in general it may be said that the same conditions of temperature that favor the development of ordinary inflammations of the throat, also predispose to the development of retropharyngeal lymphadenitis and abscess. Scrofula, which predisposes to inflammation of the lymphatic glands in general, is a very important predisposing cause of this affection. The influence of local affections of the mouth and throat on the neighboring lymphatic glands must not be overlooked. Indeed, the frequency

of diseases of the mouth and throat in children may account for the fact that retropharyngeal abscesses are almost exclusively met with in the early years of life. Pharyngitis does not excite the formation of an abscess by direct extension of inflammation to the retropharyngeal connective tissue, but in the same way that eczema of the head, for instance, causes swelling and inflammation of the neighboring glands.

The disease may follow a very acute or a very chronic course. The abscesses may be formed in two days, or they may require eight weeks or more for their development. The course is generally acute in nurselings. The symptoms consist in difficult deglutition; a peculiar, muffled tone of voice, but no hoarseness in uncomplicated cases; more or less marked disturbances of respiration and circulation; snoring during sleep; occasionally cough, stiffness of the neck, moderate fever, emaciation in chronic cases, regurgitation of food and vomiting, and in rare cases convulsions. Inspection of the throat will reveal a large amount of tough mucus, narrowing of the fauces, and redness of the mucous membrane, and, when a good view of the posterior wall of the pharynx can be obtained, a tumor of greater or less size, and of the same color as the mucous membrane. The tumor is rarely in the middle line. When suppuration has set in, it appears paler and yellowish. In most cases, however, inspection will fail to reveal the tumor, and digital exploration must be resorted to. This will afford the most reliable testimony, and if rapidly made will cause but little vomiting or suffocation. External palpation in the neighborhood of the angle of the jaw is also useful, both to determine the presence of the tumor and to ascertain the existence of fluctuation. The symptoms of the retropharyngeal abscesses which complicate scarlet fever or diphtheria are generally overshadowed by those of the primary affection. It is, however, a very rare complication of diphtheria. The secondary retropharyngeal abscesses generally run a very slow and chronic course.

Although this is one of the most severe and dangerous affections of childhood, only 11 of the 144 cases observed by Prof. Bókai proved fatal. Spontaneous opening of the abscess occurred in 19 of these 144 cases; but in general this is a rare occurrence, and death is apt to result when an early opening is not made. An opening will often save the child when it is apparently in the throes of death. The younger the child the worse the prognosis. The escaping pus may get into the air-passages and cause suffocation if the child be too young or too weak to expel it by coughing. In two of Prof. Bókai's cases pus got into the trachea and asphyxiated the children; but respiratory movements and cough were excited by the application of electricity, and life was restored. Pneumonia may result from the introduction of pus into the air-cells. Facial paralysis occurred in 3 of the 144 cases. All cases of lymphadenitis do not go on to suppuration, resolution setting in in many cases.

In the treatment, internal remedies are useless except when indicated by the presence of complications or of constitutional diseases. In the acute cases, frequently changed cold applications to the neck are most useful in the first stage. Ice may be given if the children can be made to suck it. Leeches do not seem to do much good. In chronic cases the cold applications may be of an irritant character and need not be changed so often. As soon as suppuration begins, poultices should be substituted for the cold applications. As soon as fluctuation is distinct, especially if the disturbances of deglutition or of respiration are marked, the abscess should be opened. This will be most easily done with the knife, but sometimes the thin wall may be bored through with the finger. Light pressure on the affected side of the neck will render the tumor more tense and facilitate both the opening and the escape of the pus. Bending the head slightly forwards will facilitate the escape of the pus through the fauces and mouth. The pharynx must subsequently be kept clean by gargling or by injections with lukewarm water, and a reaccumulation of pus prevented by keeping the wound open. The hemorrhage is generally slight, but if excessive may be controlled by cold injections. In some rare cases the abscesses may be opened externally at the side of the neck.—*Jahrbuch für Kinderheilkunde*, Band X., Heft 1 and 2.

Rare Case of Hip Dislocation.—Dr. William A. Johnston reports a case, seen in the surgical clinic of Prof. Gross, of a child seven years old, who when six months of age had a fall, followed by the deformity common to iliac dislocations. Prof. Gross called attention to the infrequency of this injury in the young, because the force necessary to induce such an injury would rather lead to separation of the epiphysis of the bone, owing to its imperfect development and consequent inability to resist external injury. He considered the case remarkable, and one he had never seen at this age, nor did he think there was a similar one on record. Reduction would be useless, as there was no acetabulum, the cavity having been absorbed and filled up.—*Philadelphia Medical Times*, Oct. 14, 1876.

Injections of Carbolic Acid for Neuralgia.—Dr. Merteu, of Neuwedell, reports four cases of severe neuralgia that were cured with surprising rapidity by one or two hypodermic injections of carbolic acid. In the first case, the patient, a hysterical young woman, had suffered for several months from strabismus and ptosis of the left eye, with diminution of the field of vision in the same eye by almost one-half. Ophthalmoscopic examination gave negative results. She was suddenly seized with intense neuralgia of the left malar nerve, for which 20 drops of a 2 per cent. solution of carbolic acid was injected over the cheek-bone. It caused at first intense burning pain, with redness and swelling at the point of injection, but one hour later all pain had entirely disappeared. On the next morning there was no pain at all, the ptosis and strabismus had entirely disappeared, and the field of vision of the left eye had markedly increased. Unfortunately, the patient did not again present herself for observation.

The second case was one of acute oöphoritis, with severe neuralgia of the external cutaneous nerve of the thigh, and intense pain about the anus on defecation. Two injections of a syringeful of the 2 per cent. acid solution permanently relieved all the pains.

The third case was one of suppressio mensium and sciatica. Two hours after the injection of a syringeful of the above solution the pain ceased entirely and did not return. Menstruation was subsequently regular.

The last case was one of myalgia of the right side of the neck consequent on exposure to cold. A single injection of the 2 per cent. solution produced a cure.—*Allgem. Med. Cent. Zeit.*, Sept. 6, 1876.

Abolition of Mechanical Restraints for the Insane.—Dr. J. L. Bodine, of Trenton, N. J., read a very able paper on this subject at the recent meeting of the Social Science Association, at Saratoga.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, November 18, 1876.

THE HEALTH OF PHILADELPHIA.

In a recent issue we drew the attention of our readers to some facts which were collected in Philadelphia, bearing on the health of that city, and we then showed by comparative statements that there had been a decided increase in typhoid, which is now believed to be largely influenced, if not actually produced, by imperfect sewerage or polluted water. The question is one which is not interesting to New Yorkers alone, but to the whole country, and we felt gratified in being able to make certain tolerably definite statements in regard to the actual facts in the case.

To many persons it may have appeared that in so doing we failed to show all the facts, for it is well known that a great deal of sickness, especially of a diarrhœal nature, has attacked persons after they visited the Centennial Exhibition. Rumors have also been prevalent to the effect that many have died of typhoid after their return. Almost every physician in the country has cognizance of one or more such cases.

Probably the reports about them have been much exaggerated, but at the same time there is doubtless some truth in the matter.

In the article referred to we showed that both the sewerage is bad and the water is more or less polluted, and that at one time it contained a pretty large amount of sewage. We are not prepared to say now, any more than then, that these unhygienic conditions were related to typhoid as cause and effect, because it may still appear that the increase has been as great in other localities—in fact, that we have been suffering from a general epidemic of the disease all over the country.

The benefit of this possibility we are willing to give to our Philadelphia friends; but we are rather surprised to find it stated by our contemporary, the *Philadelphia Medical Times*, that the Quaker city, "this summer, has been extraordinarily healthy, and that the water supply and the general hygienic arrangements have stood the very severe test so well as to reflect credit upon the city authorities and to demonstrate the great value of the homestead method of living practised in this city."

In the face of the large comparative mortality this summer from typhoid, we fail to see where either the "homestead method" or the "civil authorities" are deserving of any special credit. But this is a matter of little consequence. We are more surprised, however, to find it further announced "how much better the Philadelphia doctors are than those of New York." We might pardon this innocent conceit, which seems to be also a disease of an epidemic character in Philadelphia, but, as we have already stated, the facts are the other way, for typhoid fever, about which alone there is discussion, has shown a far greater comparative mortality in Philadelphia, this season, than in New York. We do not, of course, infer that it was owing to the doctors, for may it not have been the water or the sewage? We have no doubt, however, that the matter has been really exaggerated by the secular papers; but our friends, in their attempt to disprove such sensational statements, display a ridiculous sensitiveness in regard to a supposed conspiracy against the success of the Exhibition. We are told that "extraordinary efforts have been made by certain newspapers to injure the Centennial Exhibition," etc.

Perhaps this is an excusable anxiety, inasmuch as any allusion to the manner in which the Centennial wheel has revolved is a reflection upon the watchfulness of the flies upon it.

Reviews and Notices of Books.

THE STUDENT'S GUIDE TO DENTAL ANATOMY AND SURGERY. By HENRY SEWILL, Member of the Royal College of Surgeons and Licentiate in Dental Surgery, Dentist to the West London Hospital, etc., etc. Philadelphia: Lindsay & Blakiston. 1876.

This book is elementary. It has been the aim of the author to handle his subject concisely and independently of needless technicalities, and in that respect he has been quite successful. The first chapter is devoted to the anatomy and histology of the teeth. In the second the author takes up the subject of development of the teeth and sets forth doctrines which are somewhat at variance with those advanced by Goodsir, which have heretofore been quite generally received. It is here stated that, as early as the seventh week of intrauterine life, the first trace of dental development becomes visible, and from that period the successive steps are clearly traced and illustrated.

The third and fourth chapters are devoted to the study of the growth of the jaws, dentition, malformations and irregularities of the teeth.

In the two chapters immediately following the subject of dental caries and its treatment are considered. The author believes the great cause of caries to be an acid, and that the acid is derived from the oral mucous membrane, from decomposing particles of food, or from any food containing fermenting albuminoid substances.

When the decay has been once established, it is hastened by the development of low vegetable organisms. It is believed, however, that the leptothrix buccalis plays only a second part in dental caries, and only has some share in hastening the destruction of the already decomposing parts.

The subject of treatment is divided into preventive, which embraces thorough cleanliness, the use of strong alkaline, bland and soluble substances for washes, and powders; into treatment of the incipient stage; and then follows a lengthy description of the operation of filling teeth.

In the seventh and eighth chapters are studied exposure of the pulp, diseases of the pulp, dental periostitis, alveolar abscess, periostitis and necrosis of the maxillæ, dental exostosis and necrosis, and absorption of roots of permanent teeth. A chapter on disease of the gums and oral mucous membrane follows in order, and is immediately succeeded by a chapter on abrasion of the teeth and mechanical injuries. The remaining portion of the book contains chapters upon salivary calculus or tartar; morbid growth connected with the teeth, and such as odontomes, cysts of the jaw, epulis, etc.; diseases of the antrum; pivoting teeth; neuralgia and diseases of the nervous system; and, lastly, extraction of teeth.

The book is well written, is fairly illustrated, and is a convenient handbook for the student.

Transactions of the New York Odontological Society. Regular Meeting, Extra Session, December 20th and 21st, 1875. Philadelphia: Samuel S. White. 1876.

This volume of 117 pages contains much that is interesting, not only to dentists, but to the general practitioner of medicine. It is prefaced by the names of the officers of the Society, and has for its contents the papers read and the discussions to which they gave rise.

The first paper consists of "Notes from the Practice" of Dr. W. G. Burs, of Montreal. The second is upon "Food; its Relation to the Teeth," and its author, Dr. L. D. Shephard, of Boston, notes some interesting results obtained by proper diet, especially oatmeal and whole wheat, which contain elements essentially necessary for the support of the osseous, nervous, and muscular tissue. Dr. N. W. Hawes, of Boston, read the third paper, and in it considered the proper management of the "Sixth-year Molars." He disapproves of the removal of these teeth, because of pressure, and on the ground that their places will be filled by the twelve-year molars, for the reason that if continued future generations will have a contracted jaw by inheritance.

The fourth paper is upon "Facial Neuralgia," and was read by Dr. C. N. Pierce, of Philadelphia. Dr. Pierce justly mentions the importance of acquiring a thorough knowledge of general histology, physiology, pathology, and therapeutics, if the dentist would most successfully avoid embarrassment and mortification in his practice.

The next paper is from the pen of C. Spence Bate, F.R.S., of Plymouth, England, and is entitled "The Antiseptic Treatment of the Dental Pulp and Pulp Cavity."

Dr. Wm. H. Atkinson, of New York, next read a paper on "Necrosis and Caries, Formation of Pus, and Inflammation defined: in which the doctrine is advanced that the pus is dead blood, and that inflammation is a disturbance of the tensional harmony in the current of nutrition."

"The Chemistry of Dental Caries" is presented in a paper by Dr. S. B. Palmer, of Syracuse, in which occasion is taken to study the first principles and laws accounting for so much that is mysterious in us. The author of this paper struggles at some length among "electro-capillary currents," "local circuits," "principles of solution," "single and double fluid principles and species," "acid manufactory," etc., and comes to the conclusion that, "if we wish to consult nature's laws, we must not look in the attic of theories and speculation, but in the foundation of fact and truth where they were put in the morning of creation." The conclusion is good, but the trouble is, how are we to be assured that the "foundation of fact and truth" has been reached?

"Pressure and Contact as Causes of Dental Decay" is the title of a paper read by Dr. Henry S. Chase, of St. Louis, and was followed by a paper on "Practical Lessons in Comparative Odontology," from the pen of Charles S. Jones, M.A., M.R., C.S., London, England.

"The Influence of Vital Force in Restoring Dental Caries" is considered by M. S. Dean, of Chicago, and the author advocates the existence of a "special vital force," although it may not be able to manifest itself independently of the chemical and physical forces.

The last paper is upon "The Practical Results Obtained with Plastic Fillings, as compared with Theoretical Tests," by Thomas Fletcher, M.C.S., Warrington, England.

The papers by Drs. Beers, Shephard, Pierce and Jones are illustrated with wood-cuts.

The discussions to which the papers gave rise are lively and interesting. We have carefully looked, but have not been able to determine, *where* the regular meeting, extra session, of the New York Odontological Society for the year 1875, was held.

Compendium of Histology: Twenty-four Lectures. By Heinrich Frey, Professor. Translated from the German, by permission of the author, by George R. Cutter, M.D. Illustrated by 208 engravings on wood. New York: G. P. Putnam's Sons. 1876.

This compend contains the most essential facts in Histology desirable for students and practising physicians. It meets an oft-expressed desire, and the learned author has succeeded most admirably in his work.

The text is arranged in the form of lectures, of which there are twenty-four. The hand-books of Histology have been made so voluminous that a concise and yet comprehensive statement of the important facts relating to this branch of our science cannot fail to be greeted with pleasurable considerations. The well-established reputation of the author as a histologist is a sufficient guarantee for the excellence of the book.

The first lecture is general, and is devoted to the study of protoplasm, the cell, and its derivatives. In the second, a classification of tissues is given. In the third, the cell-layer, which covers the external as well as the internal surface of the body, is studied under the head of The Epidermis, or the Epithelium. The connective-substance group, embracing cartilage, gelatinous tissue, reticular connective tissue, and fat, is taken up in the fourth lecture; and the study of true connective tissue follows in the fifth. In the sixth and seventh lectures the histology of bone tissue, dentine, enamel, and lens tissue, is given; while the eighth is consumed entirely by muscular tissue. The blood-vessels form the subject of the ninth; and their intimate relation to the lymphatic glands and the lymphatics is shown in the tenth lecture. This, naturally enough, leads to observations upon lymphoid organs, or the so-called blood-vascular organs, in older times

erroneously called "glands," which make up the eleventh lecture. The histology of gland tissue appears in the twelfth lecture; and the relatively simple nature of the digestive apparatus, with its glands, is taught in the thirteenth; while the pancreas and the liver, with its peculiarities, are considered in the fourteenth. The lungs absorb the fifteenth lecture; and the kidneys, with the urinary passages, eliminate the sixteenth; while conceptions, with reference to the histology of the female generative glands, are introduced in the seventeenth; and these are followed by a presentation of that of the male generative glands in the eighteenth. The nineteenth and twentieth lectures are devoted to nerve tissue, and the arrangement and termination of nerve fibres. The histology of the central organs of the nervous system follows in lectures twenty-one and twenty-two; and from these the author passes to the organs of sense. The last lecture gives us the histology of the eye.

The translation is very good, fully sustaining the translator's reputation. The book is bound in good style, is printed on excellent paper, and in large, clear type, and does its publishers very great credit. It is far superior in appearance to the American edition of the author's larger work upon Histology.

ETUDES HISTOLOGIQUES SUR LE LABYRINTHE MEMBRANEUX, ET PLUS SPÉCIALEMENT SUR LE LIMAÇON CHEZ LES REPTILES ET LES OISEAUX. Par PAUL MEYER. Strasbourg, 1876.

THIS work, as its title states, is a histological study of the membranous labyrinth (of the ear), and more particularly of the cochlea, of certain reptiles and birds. It covers 180 pages, and is illustrated by five colored lithographic plates, very beautifully executed. The territory explored by the author is one with which anatomists are already familiar, through the labors of Breschet, Deiters, Reissner, Hasse, Hensen, Claudius, Boetteher, Max Schultze, Waldeyer, and others. In fact, so thoroughly have these observers done their work, that but few points in the minute anatomy of the labyrinth still remain to be cleared up. Under these circumstances it seems almost a matter for regret that so much time should have been spent by the author in travelling the beaten road, when light is urgently wanted on points like the following: the exact anatomical relations of the membrana tectoria (Corti's membrane), whether attached at both edges or only at one; the terminal distribution of the nerve fibrils, whether supplied to the inner and outer hearing cells exclusively or also to other structures in Corti's organ; the existence or non-existence of the "helicotrema," and, if present, what is its size, shape, and relations. The patient and careful investigations of which this volume gives evidence would have surely led to more valuable results had they been confined to the elucidation of any *one* of the doubtful points just enumerated, instead of being spread out over the *entire minute anatomy* of the labyrinth.

MÉMOIRES SUR LA GALVANO-CAUSTIQUE THERMIQUE. Par le DR. A. AMUSSAT FILS. Paris: Germer Baillière. 1876.

THIS volume of 125 octavo pages contains a brief historical notice of the principal applications of the galvano-cautery, and a recital of various cases treated by the author and others; together with woodcuts of morbid growths, etc., removed, and of instruments designed for the purpose of meeting certain special indications. The work will prove useful and suggestive to the surgical practitioner. The typography, paper, and cuts are better than usually found in French medical works.

A CONTRIBUTION TO THE TREATMENT OF UTERINE VERSIONS AND FLEXIONS. By EPHRAIM CUTTER, A.M., M.D. Second edition, entirely rewritten. Boston: James Campbell. 1876.

THE chief value of this work lies in those portions of it which deal with the mechanical treatment of displacements and distortions of the uterus. In the appliances which the author recommends, the base of support is chiefly extra-vaginal; this arrangement being adopted in order not to interfere with the normal tonicity of the vagina, which Dr. Cutter considers to be of prime importance in maintaining the uterus in its normal position. While we may admit that many of the intra-vaginal pessaries in common use produce an objectionable amount of lateral distention of the vagina, and that Dr. Cutter's pessaries have proved of value in practice, we cannot allow that he satisfactorily proves that dilatation of the vagina "constitutes the essential factor of the unnatural condition," or that his instruments do not "take any bearing upon the lateral vaginal walls."

In so far as they are confined to what we may term uterine orthopædics, Dr. Cutter's observations are interesting and valuable, but, when he wanders from this aspect of his theme, we find, for the most part, little else than the dogmatic statement of conclusions drawn from insufficient premises, and not always pertinent to the subject under consideration. Indeed, a large portion of the book might better have been left out, such as the lengthy diet list, the diatribe against white flour, the plea in behalf of investigators as entitled to the assistance of men of wealth, etc., etc.

The author's style of writing is deserving of the severest criticism, from which his deprecatory preface should not protect him. He seems not to know that, in writing, simplicity is the chief element of beauty, but falls into the error of so many writers who parade their solecisms as *pièces de résistance*. His errors in the use of technical terms are very numerous, some of them even betraying ignorance of anatomy, as, for instance, the expression "anterior superior spinous processes of the *ischia*," which occurs repeatedly. We are not at all surprised to find him among those who speak of "the pubis," but we must record our admiration of the perverse ingenuity which led him to supplement this common error with the expression "os pubes."

Many of the woodcuts, with which the work abounds, are admirably fitted to give currency to anatomical errors. With scarcely a single exception, those of them which show a section of the pelvis represent an inordinate distance between the pubes and the sacrum, and the vagina as attached to the uterus very near its fundus.

The book is very handsomely printed, and in every way creditable to the publishers.

A RELIABLE SIGN OF DEATH.—This sign consists in the absence of contraction of the pupil, after puncture of the cornea and evacuation of the aqueous humor. When the pupil contracts, life is still present; when it remains immovable, it is a certain sign of death. The puncture of the cornea may be made with a cataract knife, or even an ordinary lancet. It is a harmless operation.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, October 11, 1876.

Dr. Chas. K. Briddon, President, in the Chair.

MORBUS COXARIUS—THE ADVISABILITY OF AN EARLY OPERATION.

Dr. Sayre presented two specimens of exsection of the hip for morbus coxarius, with the following remarks:

Case No. 64.—James A. McLaren, aged four, 317 West Twentieth street, three years ago fell from a crib, and was never able to stand upon his right leg afterwards. No treatment was applied for six months, when a short hip splint was applied, which made him comfortable. This was worn for seven months, when the parents removed it, thinking the child cured. Was not seen again until July, 1876, when a large abscess was opened upon the outer side of thigh.

October 11, 1876.—Since last date two other abscesses have formed on inner and anterior part of thigh. All the sinuses are discharging profusely, and the child is running down. Exseeted to-day at Bellevue Hospital. The involucrum surrounding the upper portion of shaft was very thick, causing great difficulty in removing the head. Finding it impossible to luxate the femur, it was sawed just above trochanter minor. The upper fragment was removed with great difficulty with strong forceps, when it was found that the head was entirely absorbed, and the neck had pierced the acetabulum, causing the difficulty of removal.

Case 63.—Thos. Shead, aged five, Philadelphia. Had a fall eighteen months before, and the disease followed immediately.

Was taken in two weeks after to the Orthopedic Hospital. Six months after an abscess formed and was opened, and continued to discharge until the present time.

September 7, 1876.—He was brought to the Philadelphia Hospital while I was making my report on hip disease to the International Medical Congress. In consultation with Dr. Lister, of Edinburgh, Dr. Adams, of London, Hingston, of Canada, Post, of New York, Moore, of Rochester, and others, exsection was decided upon, and I operated at the time.

The head and neck were absorbed, and acetabulum perforated. Bone was sawed off below trochanter minor, and child dressed in wire cuirass. The after treatment was left under care of Drs. Mowray and Holland. The wound healed entirely in four weeks, and in six weeks he was brought to Bellevue Hospital, New York, in the cuirass, from which he was removed, and a long splint applied, on which he could stand and walk with scarcely perceptible shortening and good motion. He returned to Philadelphia the same way.

Dr. Sayre remarked in reference to the second case, that it afforded the best possible argument for an early operation. Had such been done, there would have been no necessity for nature to throw out involucrum.

In this connection he mentioned the case of the boy who had been operated upon before suppuration had taken place, the head of the femur being simply eroded. That case healed up in six weeks, at the end of which time the child was in perfect health.

Dr. Briddon alluded to the case presented by Dr. Crosby, in which the dead bone had been imprisoned by nature. He could not understand why there should be any doubt regarding the propriety of an early operation in these cases.

Dr. Sayre.—There is such a doubt among the surgeons of Philadelphia. The operation is advised by some only as a last resort.

Dr. Briddon.—In consultation upon a case a year ago, I heard the opinion expressed by a distinguished surgeon, that the large majority of cases of morbus coxarius get well without an operation. I believe a large number of cases will recover in the better classes of society; but such recoveries take place only after long suffering, and after the limbs have become atrophied and distorted.

Dr. Sayre.—If there be progressive caries in spite of the correct hygienic treatment in the earlier stages, then the obvious duty of the surgeon is to operate without delay.

Dr. Briddon did not think it safe to say that whenever the head of the bone was supposed to be free from erosion, that an operation should not be performed, inasmuch as the acetabulum might be eroded, a condition which never could be diagnosticated until the parts were exposed.

Dr. Peters related a case which had recently come under his observation, in which an apparatus had been worn for several years, and in which there had been much suffering during that time. He was convinced that all of this could have been prevented by an early operation.

THE TREATMENT FOR TAPE-WORM.

Dr. Beverley Robinson presented a specimen of tænia, with the following history:

The patient was a female cook, aged thirty-five years, who had suffered for eighteen months with symptoms of tape-worm, but it was not until last summer that the diagnosis of the disease was made. Dr. Robinson saw her at this time, and learned that shortly before she had passed a portion of the worm. A drachm of the fluid extract of malefern was prescribed in sweetened milk, after the effects of a full dose of castor-oil. Two days after seven feet of the tænia came away. This was attended with a marked relief of all the symptoms. Notwithstanding the dose was twice repeated since then, no more of the worm was discharged.

The questions which naturally presented themselves were: 1. What caused or gave rise to the tænia? 2. Will it recur?

In reply to the first, I can merely draw attention to the fact that the patient was a *female* and a *cook*, and these circumstances, according to Warruch* and Davaine,† are very important in considering the etiology of this worm. In 206 cases of tænia solium collated by the former, there were 71 men and 135 women; and the latter believes cooks to be especially exposed to infection by tænia, owing no doubt to their frequent immediate contact with uncooked meat.

In answer to our second question, I may remark that authorities on this subject are less inclined to the belief that the expulsion of the *head* of the tænia is absolutely necessary to a successful treatment, than they formerly were. Still, as in the specimen before you, there are evidently no segments from near the head, and as this is the portion of the worm *most important because it grows most actively*,—I would not like to be too affirmative in pronouncing a perfect cure.

* Oest. Med. Jahrb., 1841, cited by Valleix.
† Traité des Entozoaires, Paris, 1860.

Dr. Robinson stated in conclusion that it was always necessary to have the worm discharged entire to secure a good recovery. He believed it possible that the head might be expelled after the natural death of the worm, independent of medicine. In fact, he believed that in most cases the medicine got more credit than it deserved, and that the discharge of the worm after the administration of a vermifuge was oftentimes a mere accident.

Dr. Sayre was most inclined to explain the effect of some vermifuges in the light of a mere coincidence.

Dr. Peters remarked that he was in the habit of treating tænia with malefern in the form of a drachm of the powder with ten drops of the oil. Three doses of this were given in the course of twenty-four hours, followed by a purgative.

Dr. Briddon had been most successful with the ethereal extract of malefern. His plan was as follows: The first day a full dose of black draught, the next day beef-tea, the next night a dose of castor-oil, and the following morning a ʒ i. to ʒ ij. of ethereal extract of malefern. Generally in three or four hours the worm came away. If the head of the tænia was not discovered in the passages, the presumption was that it had been lost; at all events, he was not inclined to repeat the medication until three months have elapsed.

ANEURISM OF AORTA BURSTING INTO TRACHEA.

Dr. R. Osgood Mason presented a specimen of aneurism of the arch of the aorta, with the following history:

Mrs. Y., æt. fifty years, was thirty years married, had never been pregnant, and had enjoyed good health during most of her life. I first saw her August 31, 1876. Her chief complaint was of pain extending from the lower part of the sternum upward and backward to the left scapula and top of the shoulder, and also down the left arm. She had some dyspnœa, especially on taking exercise, and lately a peculiar and somewhat troublesome cough. Her voice, naturally soft and musical, had become uncertain and stridulous. She had difficulty in swallowing solid food, and usually experienced considerable pain immediately after eating.

Most of these symptoms had been growing gradually worse for several months.

Physical examination showed dulness over nearly the whole left side of the chest, and increased resonance upon the right, the contrast being very marked. The vesicular character of the breathing was diminished, but not destroyed, upon the left side, and correspondingly increased upon the right. The heart was somewhat enlarged, and its action enfeebled, and there was a loud regurgitant murmur at the aortic opening. My diagnosis was a tumor, probably aneurismal in character, pressing upon the trachea and probably also upon the œsophagus—insufficiency of the aortic valves and dilatation of the left side of the heart. The main points were communicated to the patient and a consultation advised. One was accordingly arranged with Dr. Loomis for Monday, Oct. 2d. On Saturday, Sept. 30th, however, after an unusually hearty dinner, she was suddenly seized with hemorrhage, the blood bursting with violence from the nose and mouth. She fell forward upon the floor and almost immediately expired.

Post-mortem by Dr. F. R. S. Drake, twenty hours after death. Rigor mortis well marked, body well nourished, adipose tissue abundant. On opening into the cavity of the chest, considerable fluid was found in the left pleura, but no adhesions or other signs of inflammation. The lung was compressed or shrunken to about one-half its normal size.

The right pleura was slightly adherent; the lung itself was increased in size from congestion and compensatory emphysema.

Examining the heart, we found fluid to the amount of three ounces in the pericardium. There were clots in the heart and in all the large vessels connecting with it. The cavities of the left side were somewhat enlarged and the walls thinned. The ascending aorta was also considerably dilated, and the whole thoracic portion of the vessel was the subject of atheromatous degeneration. The semilunar valves were insufficient, the edges being thickened and dotted with atheromatous deposit.

Laying open the aorta along the whole arch, near the middle of the transverse portion, under the space where the subclavians and left carotid are given off, and directly in front of the trachea, there was found a large opening through the posterior wall leading into an aneurismal sac. The sac was found adherent to the anterior wall of the trachea, and at the point of adherence—just at the point where the left bronchus is given off—was found the opening into the trachea through which the fatal hemorrhage had occurred.

No other organs were examined.

In conclusion, Dr. Mason mentioned as a curious coincidence, that the husband of this lady suddenly died on the following Monday. No autopsy was made in his case.

Dr. Finnell remarked that Dr. Mason's case was one of a type which were repeatedly presented to the Society, and in which no positive symptoms of aneurism were present during life.

Dr. Sayre remarked that the change of voice was a very suspicious circumstance in connection with Dr. Mason's case.

Dr. Robinson remarked upon the value of the laryngoscope in clearing up the diagnosis of all cases in which dysphonia or aphonia was present. The diagnosis from ordinary laryngitis from simple paralysis of the vocal cords was not difficult. In the former case there was always thickening of the membrane of the cord, while in the latter they presented their usual shining appearance. Even when no dysphonia existed, it was possible to discern unmistakable modification in the movements of the cord, which were always significant, if not pathognomonic. He was in fact so strongly impressed with the value of the laryngoscope in these obscure cases, that he thought every physician should not consider his examination of a case complete without its use.

Dr. Peters remarked that in the ninety cases of aneurism of the aorta presented to the Society, the diagnosis was made in the large majority before the post-mortem examination.

Dr. Briddon referred to a case of aneurism of the arch of the aorta, in which no diagnosis of was made until a blowing sound appeared over the vertebral prominence.

Dr. Mason remarked that the point of interest to him was in regard to any known method of diagnosticating an intra-thoracic tumor from an aneurism.

Dr. Post stated that although there were no differences in symptoms between these two kinds of tumor, aneurisms were so common that there was little liability to error.

EPITHELIOMA OF THE FACE.

Dr. Post presented specimens of epithelioma of the right side of the face. The disease first showed itself two years ago, and gradually extended forward

over the ramus of the jaw, down as low as the angle of the jaw, and backward towards the mastoid region, involving the lobe of the ear and a portion of the meatus auditorius. There were no secondary enlargements discoverable. In the operation of extirpation of the mass, the lobe of the ear was sacrificed, and a portion of the wall of the meatus. After dissecting around the tumor and separating it from the subjacent parts, portions of the masseter muscles were removed. Cutting behind the ramus, a large vessel was encountered, which proved to be the external carotid artery. Dr. Hinton, who assisted at the operation, placed his finger upon the vessel until a ligature was applied. A formal dissection was then made, and no important blood-vessels having been cut, not much blood was lost. The tumor adhered to the parotid, but was not originally connected with it. Although a portion of the facial nerve was removed, the eye remained closed, at least up to the time that Dr. Post left her, which was in the progress of recovery from the effects of the ether. By economizing the integument around the lobe of the ear and sliding the skin from the neck, a very decent covering was made for the cavity left after the operation.

Dr. Finnell presented a specimen of rupture of the uterus, after which the Society adjourned.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, November 2, 1876.

Dr. S. S. Purple, President, in the Chair.

HOW THIRTY-FIVE CONSECUTIVE AMPUTATIONS WERE SUCCESSFULLY TREATED ONE HUNDRED YEARS AGO.

Dr. Stephen Smith read a brief but interesting paper, which consisted of a *résumé* of the method of amputation practised by Edward Alanson, in the Liverpool Infirmary, and reported in the year 1779. Alanson's report, at the time it was made, was regarded by the surgical world as incredible, and questions were raised on all sides touching its reliability.

To the statement that only carefully selected cases had been operated upon, the answer came that no refusal had been made to operate whenever the support of a single colleague could be obtained. The symptomatic fever, startings and spasms were all very slight; the pain upon dressing was only trifling; there was but little discharge, too slight to give the least trouble; there was no necessity for removing the dressings in a single instance on account of hemorrhage; there was not the smallest exfoliation of bone, except in one case; at the end of a month after the operation, the wound was healed, either perfectly, or so that less than a sixpenny piece in size remained open; the cicatrix was not tender; the stumps were not conical, and the patients could walk upon them freely. Alanson was fully alive to the dangers of foul air of hospitals, as shown by the fact that one patient was removed from the infirmary during a severe attack of erysipelas, and, after being bathed and supplied with new clothing, was placed in a new building near at hand.

The statements made by Alanson regarding his success were discredited by the average surgeon of that time, and the incredulity was due to the direct influence of results previously obtained in amputation. For amputations had been regarded as the most formidable operation in surgery, and unfavorable results had been conceded to be a necessity. The attempt which Alanson made was to secure primary union after an ample flap had been applied directly to the face of the stump. The first intimation that such a result could be obtained, was made in 1679, just a century previous, by Young, of Plymouth, in writing to Hobbs of London.

In Alanson's time it was supposed by the surgical world in general, that exfoliation of the bone was a necessity after amputation. Alanson's method of operating was briefly as follows: Taking the thigh as an example, the tourniquet was applied, the skin and muscles were drawn up by an assistant, the operator made a circular incision as quick as possible through the skin and cellular tissue, and then at the highest point to which the integument had retracted thrust the point of the knife down to the bone, and holding the instrument at a proper angle, it was carried around the limb so as to lay the bone bare about two or three fingers' breadth higher up than the edge of the cutaneous incision. In that way the muscles were dug out, as it were, and a cone-shaped cavity formed. A retractor was used, and the bone was divided with a saw as high as possible. Each and every artery was drawn out, all its attachments separated, and then secured with a slender ligature. The surface of the stump was well sponged with warm water. The skin and muscles were gently brought forward to cover the end of the bone and were supported by a flannel roller passing about the body and then down the limb smoothly and with moderate firmness until the extremity of the stump was reached. The skin and muscles were placed over the bone, so that only a bare line extended across the end of the stump, and the ligatures were left hanging out at the extremities of the incision in either side. If the skin did not easily cover the bone, strips of adhesive plaster were applied from below upwards. The many-tailed bandage was employed. The stump was placed on a pillow and raised only about half a hand's breadth; this was a special feature. The dressings were changed no oftener than was necessary to secure perfect cleanliness. In a word, the surgeon with great care and nicety aimed at primary union; and his success was all that could be desired. Though a century has passed, and during that time great advancement has been made in surgery, yet no records of successful amputation have been published which have equalled those published by Alanson in 1779.

The Reader did not think that a return to the method of treatment by leaving the stump open would ever yield such results as these.

Dr. Hunbard inquired whether the operation performed by Alanson was not the same as the old circular operation performed in the New York Hospital twenty-five years ago.

Dr. Smith replied that it was plain the operation performed by Alanson was not the one commonly adopted in making the cone at that time. In the usual method of performing the circular operation, three incisions were made. The first was through the skin; retraction was then made, and followed by an incision through a portion of the muscles, and then retraction followed by an incision down to the bone.

Alanson's method, however, was to insert the point of the knife at the highest point to which the skin had retracted, and, carrying it down through the muscles at an angle which would bring it in contact with the bone at some distance above the edge of the integument, sweep it around the limb, dividing the tissues as much as possible at one stroke. In that manner a cone was dug out, as it were, and ample material given to cover the bone, and then the effort was made to secure primary union.

No discussion ensuing, Drs. Beverley Robinson and Octavius A. White were elected Fellows, and the Academy adjourned.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, November 3, 1876.

DR. E. G. LORING, PRESIDENT, IN THE CHAIR.

THE DIFFERENTIAL INDICATIONS FOR THE USE OF THE FARADIC AND GALVANIC CURRENTS.

DR. A. D. ROCKWELL read a concise paper upon the above subject, in which the intimation was made that the relative value of the two currents in the treatment of disease was mainly a question of experience; sometimes one could be employed with the greatest benefit, sometimes the other; and sometimes the two could accomplish what neither could do alone.

It was to be believed that the experience of physicians would confirm this view. With regard to the use of electricity for the relief of pain, it had been generally supposed that galvanism was most useful; whereas the truth was, that faradism was invaluable as an agent for that purpose, and relieved in many cases in which galvanism was worse than useless. The author of the paper referred to the fact that a physical and physiological knowledge of the two currents was necessary if the medical man would use them in the most successful manner, but it was not his purpose at that time to study those, and he turned his attention to the third essential, namely, experience in their use. In general, it might be stated that the faradic current, probably by virtue of its greater mechanical effects, was tonic in its action, and that the galvanic, on account of its greater power of overcoming resistance, should be used when it was desirable to act upon the central nervous system. The latter, because of the superiority in exciting nerve irritability, was also used in the treatment of paralyzed muscles which did not respond to the faradic current.

A hasty glance was made: (1) at those conditions which demanded the faradic current; (2) at those requiring the galvanic; and (3) at those diseases, conditions, or symptoms which indicated an interchangeable use of both currents.

With regard to the first class but little was to be said, inasmuch as asthenopia was about the only distinct disease which demanded the faradic current alone. Concerning the exclusive use of galvanism, not very much more was to be said, although that current was the one more commonly employed in the treatment of spinal irritation, certain sequelæ of cerebro-spinal meningitis, and most skin diseases in which electricity had been found to be of service.

Under the third head, it had been found that paralysis was the condition in which electricity was most serviceable. In hemiplegia, when there existed an exalted electro-muscular contractility, electricity, if employed, should be in the form of faradization, with an exceedingly mild and rapidly interrupted current. In paraplegia, as a rule, galvanism alone was most serviceable. In the treatment of facial paralysis, especially when caused by cold striking against the side of the face, a much weaker current of galvanism might cause the muscles to act than was necessary in health, and the faradic might not produce any contractions whatever. After a time, however, the muscles might respond to faradism. In true neuralgia it was said that galvanism was most beneficial; while false neuralgia would yield most certainly to faradism. In the great majority of cases in which firm pressure aggravated pain, the galvanic current was indicated; but when such firm pressure over the course of the nerve did not increase the pain, the faradic current was indicated. That was a general rule, although there are some exceptions.

For the relief of the pain of herpes zoster, the galvanic current was invaluable. The tormenting, distressing, and acute pain of mammary cancer could be relieved in a remarkable manner by the use of galvanism; and although relief, as a matter of course, was not permanent, the necessity for the use of opium could be postponed for a long time, if not entirely avoided. Faradism, in the doctor's experience, had not been beneficial under like circumstances.

For the relief of chorea, amenorrhœa, associated with anæmia and debility, nervous exhaustion, in general the faradic current was advised.

In conclusion, Dr. Rockwell alluded to the tonic effect of general faradization. He was of the opinion that it had a wider range of application than any other method by which electricity could be employed, and that a thorough study of the practical use of the principles involved in that method would amply reward the practitioner for the time and labor spent in the investigation. The power of electricity as a tonic was first advanced by Dr. Rockwell, in a series of articles published in the RECORD nearly ten years ago, and it was believed that the correctness of his theory had since then been established by clinical experience.

In reply to a question, Dr. Rockwell expressed the opinion that all the beneficial effects of electricity could be better obtained through other means than electrical baths.

SOCIETY OF NEUROLOGY AND ELECTROLOGY.

Stated Meeting, October 30, 1876.

DR. J. C. DALTON, PRESIDENT, IN THE CHAIR.

EXPERIMENTS WITH MUSCARINE.

DR. ALLAN MCLANE HAMILTON related some experiments with muscarine, which is the active principle of the agaricus muscarius, one of the poisonous fungi. This fungus is of the large orange-red variety, mottled with white warts. His experiments were few in number, but in the main substantiated what Brunton had said. It paralyzed the heart, and seemed to have a special action upon involuntary muscular fibre. Dr. H. was engaged in experiments upon the warm-blooded animals, and expected at a future time to inform the Society as to his results.

DR. DUPUY called attention to the labors of Prevost, who had anticipated Brunton; he also alluded to the counteraction of atropia.

DR. SWEEZY had used muscarine in posterior spinal sclerosis, and considered that it had the property of abating the severe pain in the limbs, which was an early symptom of that disease.

DR. J. J. MASON related a case of a patient who lost consciousness from one to six times daily. He had a convulsive movement of the diaphragm, which was connected with epigastric pain. The pupils were alternately contracted and dilated during the attacks, and the temperature ranged from 100° to 102° F. There was a tender point over the spine, which, when touched by the electric brush, was followed sometimes by an attack. The attacks began by clonic spasms and ended in rigidity, and sometimes opisthotonos. There

was no loss of consciousness. Has passed 160 ounces of clear urine in twenty-four hours. The actual cautery had improved the patient's condition. Dr. Mason considered the case one of male hysteria. Out of 204 cases of hysteria observed by Briquet, 11 were men.

Dr. Dupuy, who had seen the man in an attack, heard a cry which was almost identical with that expressed by hysterical women. He thought that there was no reason to suppose that the patient was a malingerer, and thought the sustained spasm of the diaphragm could not be feigned.

Dr. Newman inquired whether there was heart trouble in the case.

Dr. Mason replied that there was none.

Dr. Dupuy then called the attention of the Society to a phenomenon he had observed in electro-physiology. When the exposed nerve in a galvanoscopic frog was laid in a drop of water upon a piece of rubber cloth, and the water touched by the point of a pair of forceps held in the hand of the experimenter, a convulsion would follow. This would not recur if glass plate was substituted for the rubber, nor if the blunt end of the forceps was applied.

Dr. Mason thought that friction made upon the rubber would generate static electricity enough to account for the phenomenon.

Dr. Hamilton thought that a current might be developed between the metallic element of the prepared rubber and the metal point of the forceps, which would be sufficient.

The Society then adjourned.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from November 5 to November 11, 1876.

Clements, B. A., Surgeon. To re-join his station at Fort Sanders without delay. S. O. 146, Dept. of the Platte, Oct. 30, 1876.

Forwood, Wm. H., Surgeon. Assigned to duty, temporarily, in office of the Medical Director of the Department. S. O. 165, Dept. of the South, Nov. 4, 1876.

DeGraw, C. S., Asst. Surgeon. Granted leave of absence for four months. S. O. 231, A. G. O., Nov. 4, 1876.

Hall, J. D., Asst. Surgeon. Assigned to temporary duty at Summerville, S. C. S. O. 164, Dept. of the South, Nov. 4, 1876.

Medical Items and News.

Influence of the Age of the Mother on the Sex of the Child.—In the Obstetrical Hospital of Munich, between June 1, 1859, and December 31, 1875, there were 13,469 cases of labor, with 13,621 births. Of these children, 7,021 were males, and 6,600 females, the proportion being 106.4 : 100. Dr. Hecker, who classified these cases, found that 432 primiparæ, who had passed their 30th year, were delivered of 247 male and 185 female children, the proportion being 133 : 100. The doctor thinks that the age of the mothers had some influence in deciding the sex of the children. Other observers had previously obtained similar results. Thus Ahlfeld found that of 102 children whose mothers were primiparæ over 30 years of age, 59 were boys and 43 girls, a proportion of 137 : 100. Schramm collated the cases of 599 primiparæ over 30 years of age, who were delivered of 348 boys and 262 girls, being a proportion of 132.8 : 100. In the cases classified by Dr. Hecker, the age of the father did not seem to exert any influence on the sex of the child. Ahlfeld thought that there are male and female ova in the ovaries, but if so, it would be difficult to account for the fact that more males than female ova are matured in women who do not become pregnant until they have reached 30 years of age.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending November 4, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Nov. 4	0	17	31	1	17	40	2
" 11	0	18	53	4	12	47	5

Dr. J. A. Octerlony, of Louisville, has resigned his professorship of materia medica in the Louisville Medical College and the Kentucky School of Medicine. This is a great loss to the double-headed school.

Seguin's Prescription Book.—We are surprised to notice that Messrs. J. B. Baillière & Son, of Paris, have republished the useful Pocket Prescription Book of Dr. E. Seguin, of this city, and that they have entirely ignored the authorship and omitted his name. If it is true, as we have heard, that Dr. Seguin freely offered the work to these publishers, it is indeed more than strange that they should have acted as they did. As the publishers call for suggestions tending to improve their edition, we would suggest one that occurs to us as a very important one, and that is, to put the name of the real author upon the title-page.

Brigham Hall, Canandaigua, N. Y.—Dr. Dwight R. Burrell, for several years Assistant Physician to Bloomingdale Asylum for the Insane, has been appointed Resident Physician of Brigham Hall.

Wisconsin State Board of Health.—Wisconsin has created a new State Board of Health, and the Governor has appointed the following gentlemen as members of said board: Drs. O. G. Selden, Reedsburg, one year; H. P. Strong, Beloit, two years; J. T. Reeve, Appleton, three years; Gen. James Bintliff, Janesville, four years; Dr. Solon Marks, Milwaukee, five years; Dr. John Favill, Madison, six years; and Dr. E. L. Griffin, Fond du Lac, seven years. At the first meeting of the Board Dr. E. L. Griffin was elected President, and Dr. J. T. Reeve, Secretary.

Toothache.—Dr. D. Duckworth (Practitioner) cures toothache by an application of solution of bicarbonate of soda (ʒ ss. to ʒ i. of water), after other remedies failed.

Infectious Disease.—The Montreal City Corporation have proposed a new by-law, to the effect that a fine of forty dollars and two months' imprisonment shall be imposed upon any practitioner neglecting to report to the Health Committee any case of infectious disease within twelve hours after its occurrence. The profession in that city is very much opposed to the measure.

Original Lectures.

LECTURES ON FEVERS.

By ALFRED L. LOOMIS, M.D.,

PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

(Phonographically reported for THE MEDICAL RECORD.)

LECTURE V.

TYPHOID FEVER (CONTINUED).—PROGNOSIS.

GENTLEMEN:—I have already spoken to you of the differential diagnosis of typhoid fever, and will now give you some of the more prominent rules which should govern you in its prognosis.

Prognosis.—Death may occur at any stage of typhoid fever. A typhoid patient is not out of danger until all tympanites, diarrhœa, and other abdominal symptoms, which indicate that intestinal changes are still progressing, have disappeared. Independent of complications, the duration, type, and intensity of the febrile excitement has more to do than all the other elements in determining the prognosis in any case of typhoid fever. The height of the temperature on the eighth day determines the range of temperature that may be expected on each succeeding day. If upon that day it is not higher than 104° F. or 105° F., and has been regular in its development (independent of complications), the prognosis is good; in uncomplicated cases it very rarely rises higher than the degree it has reached at that time. A prolonged high temperature (above 105° F.) after the first week renders the prognosis unfavorable.

In mild cases, during the second week a marked morning remission occurs, which begins early and continues until midday; the evening exacerbation is late, and by the end of the second week there is a marked and permanent fall in the temperature. In severe cases, the opposite conditions are observed. A sudden rise in temperature, or a rapid and extreme fall at any period of the fever, is a very bad omen; the latter often precedes the occurrence of a severe intestinal hemorrhage. Marked variations from the typical temperature of the disease indicates the existence of complications. Slight decline, accompanied by great fluctuation of temperature, during the third week, is an unfavorable symptom. The natural power of an individual to resist disease, especially the effects of prolonged high temperature, is a very important element in prognosis. The organ which is the surest indicator of such power (especially in typhoid fever), is the heart. If the pulse is full and regular, perhaps beating at the rate of 110 or 115 per minute, if the cardiac impulse is good, and a distinct first sound can be heard, even though at the end of the second week the temperature stands as high as 106° F., the prognosis is favorable. If, however, the pulse has risen to 120 or 130 per minute, if the apex beat is feeble or imperceptible, and the first sound of the heart is indistinct or altogether obscure, with a tendency to cyanosis and pulmonary œdema, the indications are that the patient's powers of resistance are failing, and under such circumstances the prognosis must be unfavorable. It is not so much the rapidity, as the regularity, a sudden falling and a sudden rising of the pulse, that indicates the impending danger. The rapid rising of the pulse upon the slightest excitement is the most unfavorable indication, as it shows extensive heart-failure and a rapid giving way of vital power.

Age.—The influence of age is very great in determining the prognosis in any case of typhoid fever.

The prognosis is much better in children than in adults. Occurring in persons over forty years of age, the prognosis is decidedly unfavorable, even though the symptoms may not indicate a severe type of the disease.

In the case of those individuals who habitually use alcoholic stimulants, whose powers of resistance to high temperature is diminished, the rate of mortality is very great.

The puerperal state renders your prognosis especially unfavorable. The danger to the patient is equally great, whether the fever comes on prior to delivery or during puerperal convalescence.

In this fever there is greater danger to those who are suffering from any form of chronic disease, than to those who are in a healthy condition at the time of the attack.

The complications which influence prognosis are more numerous than those in any other disease.

I shall briefly allude to those which are intimately connected with, or dependent upon, the morbid changes ordinarily incident to the disease, and afterward speak of those which may be designated as accidental complications.

The parenchymatous changes which take place in the different organs of the body, during the progress of this fever, necessarily influence prognosis. For instance, the muscular degenerations of the cardiac walls and the consequent loss of heart-power, which favors pulmonary and other hypostatic congestions, and the diminished quantity of blood sent to the various tissues of the body, interfere more or less with their nutrition. Necrotic and gangrenous processes, sometimes met with in the cellular tissues of the surface, and along the line of the intestines, also the venous thrombi which so frequently develop in a protracted case of this fever, are, to a certain extent, the result of this cardiac weakness. It is apparent that the development of extensive cardiac degenerations must render the prognosis unfavorable.

Excessive cardiac weakness favors the development of blood-clots in the heart cavities; these may break up and cause embolism somewhere in the course of the general circulation, and thus lead to changes which may destroy life. Again, intestinal perforations, one of the results of the intestinal changes incident to the fever, render the prognosis most unfavorable. The same is true of copious intestinal hemorrhages coming on after the third week of the fever, as well as of all those glandular changes which are a part of the natural history of the fever, and which I have already described.

Any of these changes may lead to complications which endanger the life of the patient, and consequently when they occur, necessitate a guarded, if not an unfavorable prognosis.

Some of the prominent accidental complications which may occur in the course of typhoid fever, but which do not belong to its regular history, have their seat in the respiratory organs. Slight bronchial catarrh is present in nearly every case, and can hardly be regarded as a complication. It is so much a part of the clinical history of the disease, that some have named this fever bronchial typhus. There is another much more serious bronchial complication, namely, catarrh of the smaller bronchi, or capillary bronchitis. This usually comes on during the second or third week of the disease, and if extensive, greatly endangers the life of the patient. If then during this period of the fever you have sub-crepitant râles suddenly developed

over the whole of both lungs, accompanied by great dyspnœa and an abundant expectoration of stringy mucus, you are warranted in giving an unfavorable prognosis.

Extensive œdema of the lungs occurring with, or independent of, capillary bronchitis and pulmonary congestion, sometimes comes on suddenly during the third week of typhoid fever, and indicates great failure of heart-power. The slightest indication of its occurrence should always be regarded with suspicion. It is not unfrequently accompanied by more or less extensive hemorrhagic infarctions of the lungs; these depend on embolism of some of the branches of the pulmonary artery due to fragments of clots which have formed in the right side of the heart, the result of the cardiac weakness. They often lead to gangrene of the lung. It is sometimes impossible to diagnosticate their existence during life.

Pneumonia, when it complicates typhoid fever, is generally latent. It comes on very insidiously, and unless you are on the watch for its development, and make frequent and careful physical examinations, it will pass unrecognized. It is more frequently developed during the third and fourth week of the fever, and usually is catarrhal rather than croupous in character. At first only single lobules are involved, but after a time an entire lobe becomes consolidated. When irregular variations in temperature occur during convalescence, or during the third or fourth week of the fever, there is reason to suspect the development of pneumonia. In the majority of cases the characteristic pneumonic cough and expectoration are absent. Whenever an extensive pneumonia complicates typhoid fever, the prognosis is especially unfavorable.

Pleurisy does not occur so frequently as a complication of typhoid fever, as does pneumonia or bronchitis. When it does occur, pus is almost invariably the product of the inflammatory process. Usually it comes on late in the disease, comes on insidiously, and is quite likely to pass unrecognized unless frequent physical examinations of the chest are made. In many instances it is really a sequela of the fever, not developing until three or four weeks after the fever has run its course. Its occurrence must always be regarded as unfavorable; for a year or even longer time must elapse before recovery can take place, and even then recovery is doubtful.

Occasionally, laryngitis is a serious complication of this fever. It generally occurs in those cases where the fever has been very protracted, and there is great prostration. Its presence is marked by sudden and very intense inflammation of the mucous membrane of the glottis, which is liable to become œdematous, when death may suddenly occur. It may lead to ulceration of the mucous membrane. Whenever, during any stage of a typhoid fever, the characteristic symptoms of laryngeal obstruction occur, remember the danger of œdema glottidis and of extensive laryngeal ulceration, and promptly resort to those means which shall relieve the unpleasant symptoms, and avert the danger which threatens your patient.

Pyæmia may be met with as a complication during convalescence from typhoid fever, but it is not of as frequent occurrence as septicæmia. Whenever we have septic poisoning developed, with extensive sloughs in the intestines, the prognosis is exceedingly unfavorable.

Acute gastric catarrh is another complication of this fever, the possible occurrence of which must enter into your prognosis. A patient may have reached his fourth week, and be rapidly convalescing, his desire for food returning; you endeavor to hasten his recovery by increasing the quantity of food taken, or by allowing him to partake freely of such articles of food as are difficult of digestion. The result of this overcrowding, or of imprudence in diet, is irritation and inflammation of the enfeebled gastric mucous membrane. Vomiting of a stringy mucus occurs, which by its prostrating effects endangers or destroys the life of your already enfeebled patient. I would impress you with the importance of exercising the greatest care in regard to the diet of patients convalescing from typhoid fever. They should be restricted to milk and nutritious broths in moderate quantity until all danger from this complication shall have passed.

Disturbances of nerve function have been considered under the head of symptoms, but, not unfrequently, certain brain and nerve lesions are developed, which cannot be classed under that head.

Cerebral œdema may complicate a typhoid fever during its third week, and give rise to symptoms of a grave character. A decided enfeebling of the mental powers, and a tendency to stupor, announces its occurrence.

Hemorrhagic extravasations on the surface, and into the substance of the brain, the result of degeneration of the walls of the cerebral vessels, occasionally occurs during the height of the fever. If the effusion is moderate, no marked symptoms are developed, but if a considerable extravasation takes place, it gives rise to symptoms of cerebral compression.

Meningeal inflammation is a rare complication.

The occurrence of any of these complications in any case renders the prognosis unfavorable.

You must remember that during the second or third week of the fever certain cerebral disturbances may occur, which seem to indicate the existence of some one of these complications, when really no cerebral lesion exists. Usually, these are present in patients who have had a continuously high temperature; in favorable cases they disappear after a few days. These have been referred to under the head of symptoms.

You will encounter various other disturbances of the nervous system, such as hemiplegia, paraplegia, etc., which may simulate those due to lesions of nerve centres, or local forms of paralysis and anæsthesia, which seem to be confined to individual nerves; but as these functional disturbances do not depend upon any anatomical changes, the prognosis in such cases is good.

Those changes in the kidney which are due to the parenchymatous degeneration which usually attends this fever, have been already noticed; but occasionally nephritis is developed as a sequela. The urine becomes scanty, is loaded with albumen, and contains blood and casts; the face and extremities become œdematous, and death may occur from uræmia. The occurrence of this complication necessarily renders the prognosis bad.

In a few instances under my observation, severe catarrh of the bladder had developed during convalescence, greatly complicating the case; in one instance the cystitis was accompanied by pyelitis.

Suppurative inflammation of the cellular tissue of the body, or cellulitis, especially of the surface, often complicates convalescence, and in some cases causes death. It is most liable to develop in those parts which have been subjected to long-continued pressure. Occasionally it is met with in the pharynx, and along the line of the lymphatics.

Accompanying these cellular inflammations, or occurring independently of them, not unfrequently gangrenous inflammations of the integument occurs,

giving rise to what has been called *bed-sores*. These gangrenous processes are most frequently developed at those points which have been subjected to the greatest pressure, on account of the position of the patient, such as the sacrum, nates, heels and shoulder-blades, etc. In the simplest form of *bed-sores* there is only a superficial loss of substance; in more severe cases the subcutaneous cellular tissue is involved; and in the worst cases the muscles and fibrous tissues. I have met with cases where the slough had involved the connective tissue and muscles, and laid bare the bony tissue.

A considerable number of typhoid patients who have lived through the fever, die either from the exhausting effects of these bed-sores, or from the septic poisoning resulting therefrom.

The possible occurrence of these complications must enter into the prognosis in every severe case, and the earlier they make their appearance the greater the danger.

We have now completed the list of principal complications which are to modify your prognosis in any case of typhoid fever. Before leaving the subject, I will say a word in regard to the *duration* and *mode* of termination of this fever.

Its average duration is from three to four weeks; a typical case extends over a period of four weeks. When the fever is protracted beyond the middle of the fourth week, in most instances this is due to some complication or to an extension of the intestinal ulceration. The period of greatest danger is at the close of the third week. Death rarely occurs before the fourteenth day. The prominent direct causes of death are: 1st. Toxæmia; 2d. Asthenia; 3d. Suppression of the excretory function of the kidneys; 4th. Hyperæmia and œdema of the lungs; 5th. Intestinal hæmorrhage; 6th. Exhaustive diarrhœa; 7th. Intestinal perforation; 8th. Peritonitis, with or without intestinal perforation. In nearly all cases the failure of heart-power is directly or indirectly the cause of death.

Relapses.—After typhoid fever has run its course, and after the patient is entirely free from fever, quite frequently we have a new development of the fever; these developments are called relapses. Their course corresponds with that of the primary attack, only they are of shorter duration. The temperature rises more rapidly, the eruption reappears, the spleen enlarges, the intestinal and abdominal symptoms return, and all the prominent symptoms of the primary fever are rapidly developed. As a rule, the relapse is milder than the primary attack. If it terminate fatally the post-mortem examination shows, in addition to the cicatrizing intestinal ulcers of the primary attack, the recent intestinal changes of the relapse. The lesions of the relapse, although of the same character as those of the primary attack, are less extensive.

It is very difficult to give a satisfactory explanation of these relapses. Some claim that they are the result of certain plans of treatment, especially the cold-water plan. This assertion lacks proof. Again, others hold that all relapses depend upon a new infection. Perhaps this is possible if the patient remain in the same locality and has the same surroundings as when he had the primary attack; but how shall we explain relapses in those who are removed from all the sources of the primary infection? Another explanation offered is, that a part of the typhoid poison has remained in the system, undeveloped during the primary attack, and that some time after this has passed the poison reproduces itself and sets up a second fever.

A more recent theory is, that the typhoid poison thrown off in the fæces of the patient is reabsorbed and causes the relapse. Unquestionably, it is possible for healthy glands to become inoculated by sloughs thrown off from those first affected.

In many cases it is impossible to account for the occurrence of the relapse, and all of these explanations as to the cause in any case are more or less unsatisfactory.

In those cases which have come under my own observation, I have noticed that the splenic enlargement which has existed during the course of the fever does not subside with its decline; and that the tenderness along the line of the intestines, especially in the right iliac region, continues during the period between the original attack and the relapse. In some instances, apparently, the relapse has been brought on by indiscretion in diet, or by injudicious exercise on the part of the convalescent patient. Occasionally relapses have occurred when great care had been taken against any indiscretion or over-exertion.

Original Communications.

CASES BEARING ON SOME DOUBTFUL POINTS IN THE HISTORY OF SYPHILIS.

By R. OSGOOD MASON, M.D.

NEW YORK.

THE RECORD of Oct. 21st ult., under the head of "Progress of Medical Science," gives the results of certain observations by M. Diday concerning the syphilitic infection of the mother through the fœtus.

It is well known that amongst specialists and teachers in this branch of medical science the possibility of such infection has, to say the least, been looked upon with doubt and disfavor. M. Diday's investigations in this direction, however, have led him to the conclusion that "the child begotten by a syphilitic father, without actual lesions, may infect the mother at any period of its intra-uterine life," either as ovule, embryo, or fœtus. At the time the item above referred to came to my notice, I had under observation the following case:

Mrs. A., æt. thirty years, and three years married, was at the time of her marriage an unusually strong, robust, and healthy looking woman. Soon after marriage she became pregnant and miscarried at 4½ months, with a fœtus of about three months' development, on which occasion I first attended her. After some months she again became pregnant, and was delivered at term. I did not see her during this pregnancy nor at the confinement. I know, however, that she had a most miserable recovery, which was impeded by most distressing and obstinate mammary abscesses, and followed by general ill-health. I was called to see the child when it was six months old; it was then moribund, and died the following morning of exhaustion, partly from diarrhœa, but especially from a number of large blebs or superficial abscesses situated mostly about the head, and containing an abundance of thin, sanious pus.

I saw no more of the family for several months, until in September last I was again called to attend Mrs. A. for dysentery already of a week's duration. It yielded somewhat to rest and opium treatment; it would not, however, remain under control, but gradually changed its character to a thin, dark diarrhœal discharge, always worse at night, which continued, notwithstanding my best endeavors, for full

five weeks, during which time I also ascertained that she was two months or more pregnant.

At this time (Oct. 17th) Mr. A., the husband, was taken ill with symptoms of meningitis. He had a pulse of 64, partial paralysis of the right side, and stupor, from which he was aroused with considerable difficulty, when he would just recognize those about him, answer some simple question, and immediately fall off again to sleep.

Mr. A. had been my patient for many years, and his previous history has a peculiar bearing upon his own case, as well as that of his wife. Twelve years ago he contracted syphilis, was thoroughly treated and apparently cured. Two years later the disease again made its appearance in the form of nocturnal headaches and gummy tumors about the elbows. He was then treated with large doses of iodide of potash, and made a prompt recovery, though treatment was continued for some months.

He was at that time a married man, and was the father of healthy children. After recovery from this attack his wife again became pregnant, and was delivered of a healthy child, which is still alive and apparently wholly free from syphilitic taint.

Soon after this the wife died of tubercular disease, and a second marriage was contracted, the results of which have already been given. They sum up as follows:

1st. A miscarriage, attended with symptoms of a suspicious character.

2d. A syphilitic child, followed by unusually severe and obstinate mammary abscesses and failing health.

3d. A pregnancy which in the second month is accompanied by syphilitic symptoms on the part of the mother, at the same time that symptoms reappear in a dangerous form in the father.

The illness of Mr. A. at once cleared up the whole case, and the diarrhœa, which had resisted five weeks of thorough ordinary treatment, with the advantage of rest and care, yielded in six days to two grains of blue mass, given four times a day, while going about and attending upon her husband.

Mr. A. also rapidly recovered under the use of large doses of iodide of potash and mercurial inunctions. By large doses of pot. iod. is meant a drachm every four hours, or, perhaps still better, half that quantity every two hours, until decided iodism, as indicated by the breath, is produced, and the same repeated at proper intervals afterwards.

I am also kindly permitted by my friend Dr. Loomis, of this city, to refer to the following case, which came under his observation, and which, if possible, is still more definite and cogent in its bearing.

Eighteen years ago a young man, then recently treated by the Doctor for syphilis, both primary and secondary, came again for advice concerning marriage, and was advised to delay. Soon after, however, he took counsel of his inclinations and married a young and perfectly healthy wife. In the course of the next five years two healthy children were born, both of whom are still alive and apparently free from any syphilitic taint. The next pregnancy terminated in a miscarriage, with a syphilitic fœtus. At this time the husband had a return of secondary symptoms, and soon after the wife was attacked with syphilitic rheumatism and sore throat. These yielded to appropriate treatment, and pregnancy again occurred, but terminated also in a miscarriage, and was soon after followed by periostitis and suppurative nodes. Treatment again caused a disappearance of the symptoms and return to health, and for several years no returning symptoms manifested themselves. Two years ago, however, she was again attacked, this time the disease assuming the form of pachymeningitis, with most alarming symptoms—paralysis, stupor, and even decided coma, continuing several days, and followed by delirium and dementia. This case also yielded to the large doses of iodide of potash, and resulted in a slow and only fair recovery.

An important and, in fact, the main question in both these cases is, how did the mothers contract syphilis—by primary infection or through pregnancy? And in answer I would submit the following considerations:

1st. Both the fathers were treated by the physicians respectively reporting the cases, and were known to have had syphilis in both its primary and secondary forms, thus rendering a second primary infection, to say the least, very improbable, if not impossible. Besides, each father was under the care of these physicians from the time of the first infection until the time when syphilis was developed in the mother, and no second infection occurred.

2d. The character and social position of both mothers, well known to their respective physicians, are sufficient guarantee that infection did not take place from persons other than their own husbands; and, besides, no such primary lesion is known or suspected by their medical attendants to have existed.

3d. Syphilitic symptoms did not occur until after pregnancy, but were developed during pregnancy or very soon after; leaving, as it seems to me, no fair conclusion but that the infection was a direct result of pregnancy.

It is worthy of remark in both these cases that decided syphilitic symptoms first showed themselves in the mother at or about the same time that symptoms of returning disease manifested themselves in the father.

As a last important and curious consideration, I would call attention to the fact that healthy children, still living under observation, and still free from any manifestation of syphilitic disease, were begotten by both these fathers after they had developed and been treated for secondary syphilis; and then, subsequently, without any new infection, they have begotten children through whom, and during whose intrauterine life syphilis was communicated to the mothers.

No. 123 W. 21st Street New York, Nov. 8, 1876.

THE TREATMENT OF TETANUS BY CALABAR BEAN.

By LEWIS A. STIMSON, M.D.,

one of the surgeons to the presbyterian hospital, N. Y.

During the last four years the calabar bean has been recommended as a cure for tetanus. Gubler, the latest (1874) French writer on materia medica, mentions a dozen cures of traumatic tetanus by it (some of them questionable), as against four reported failures. Wood gives forty-seven cases (variety not mentioned), with twenty-seven recoveries, and twelve cases of traumatic tetanus with five recoveries; and recently the *Lancet* has published three cases, two traumatic, one idiopathic, of which one of the former and the latter recovered. As it is essential to a proper appreciation of the therapeutical value of the agent that the failures should be reported as well as the successes, I send you the following notes of a case that came under my observation.

Hoffmann, twenty-one years old, unmarried, machinist, was admitted to the Presbyterian Hospital, 14th Oct., 1876. Four days before admission his left hand had been injured in a railway accident. There was compound fracture of the first phalange of the middle finger, the flexor tendons of the ring-finger were entirely exposed, and the ulnar half of the same finger was gangrenous. The patient consented to have the ring-finger removed, but insisted that an attempt should be made to save the other. On the 15th Oct. I removed the third finger under the carbolic spray, and dressed the wounds antiseptically. The dressing was renewed the next day (16th), and again on the 18th, the patient's temperature being then 100¼. The wounds looked well; no swelling, redness, or pain in hand or arm; suppuration slight. On the morning of the 19th the patient complained of inability to open his mouth freely. When I saw him in the afternoon the masseters were contracted; the jaw could be moved, but not opened as widely as usual. Appetite good. Ordered chloral gr. xxx. every six hours. Oct. 20th, 2 P.M., I found the patient restless, and covered with perspiration; temperature 101°, pulse 146, pupils slightly dilated and responding promptly to changes in the light; the muscles of the back of the neck and the sterno-cleido mastoids rigid; the lower jaw could be moved only one-quarter inch; the head and neck could not be flexed or rotated; all other muscles relaxed. Heart and lungs normal. Bowels had moved freely the previous evening. Ordered the chloral to be discontinued and the extract of calabar bean administered hypodermically every hour in increasing doses, beginning with one-third of a grain—brandy, beef-tea, and milk. Owing to some difficulty in obtaining the drug the first dose was not given until 7.15 P.M.

The following notes are taken from the record made at the time by the house-surgeon, Dr. Van Houten, who spent the entire night at the bedside of the patient.

6 P.M. Marked contraction of sterno-cleido mastoid, trapezius, masseter, and buccinator; profuse perspiration; complains of pain in the region of the lower cervical and upper dorsal vertebræ. 7.15 P.M. One-sixth gr. of extr. of calabar bean injected into the substance of each trapezius muscle. Pulse 146. Temp. 100°. Resp. 31. Pupils dilated. 8.15 P.M. One-third gr. cal. bean. Temp. 99°. General slight rigidity. Thighs flexed in abdomen. Complains of shortness of breath. Distressing thirst. 9.15 P.M. Breathing spasmodic, sense of suffocation. Rigidity more marked. Temp. 100¼°. Pulse 146. Injected one-third gr. 10.15 P.M. Injected one-half gr. Resp. 48, quick and labored; pulse 150. Rigidity, perspiration, and thirst continue. Patient has taken large quantities of the brandy and milk mixture. Pupils are dilated and respond to the light. 11.15 P.M. Injected one-half gr. Frequently recurring spasms, lasting for a few seconds, especially in legs and thighs.

Oct. 21st, 12.15 A.M. Injected three-quarter gr. Spasms more violent. Pain in epigastrium, abdominal muscles very tense. Other symptoms unchanged. 1.15 A.M. Injected three-quarter gr. No change. 2.15 A.M. Gave three-quarter gr. of cal. bean by mouth. Pupils slightly contracted and do not respond. Mouth can be opened a little wider, less perspiration, muscles less rigid, occasional spasms. 3.15 A.M. One gr. cal. bean by mouth. Muscles rather less rigid, occasional spasms. 4.15 A.M. One gr. cal. bean by mouth. No change. Resp. 52. Pulse 144. 6.15 A.M. One gr. cal. bean by mouth. Pupils dilated and respond. Patient sits up in bed and breathes more easily in consequence. Has not slept at all. 7.15 A.M. Injected one-half gr. Pupils not so much dilated. 8.15 A.M. Injected one-half gr. 9.15 A.M. Two-thirds gr. Respiration 46 and very labored; pulse 146; some spasms of the muscles of deglutition. 10.15 A.M. Injected one gr. No improvement in the breathing. Attempts to drink bring on spasms. Legs slightly rigid. 11.15 A.M. All the symptoms aggravated. Pupils contracted. Perspiration profuse. Injected fifteen minims of Magendie's sol., and made patient inhale chloroform.

12.15 P.M. Less restless. Temperature in axilla 102°. Injected 1½ gr. calabar bean. 1.40 P.M. Injected 15 ♏ Magendie. Patient can open his mouth quite freely; abdominal muscles and legs relaxed.

[At half-past 2 P.M. I saw the patient and found him breathing with much difficulty. None of his muscles were contracted, but every few seconds his inspirations were cut short by spasmodic contraction of the abdominal muscles, the air being driven forcibly out of the lungs. The muscles of the back and the intercostal muscles were included in the spasms. His countenance was livid, and the skin covered with perspiration. During each interval he fell into a doze and was evidently suffering greatly for want of sleep. A few inhalations of chloroform put him to sleep and stopped the spasms. The lividity of the lips gave place to a bright color, and I left him at three o'clock sleeping quietly, with instructions to have the condition maintained by means of chloroform if necessary, for four or five hours.]

5.30 P.M. Still sleeping; temperature 103°. Pulse 152; skin hot and dry, except upon the forehead. The slightest touch of the bed-clothing causes a spasm. 7 P.M. Injected one gr. calabar bean. Muscles are relaxed. He urinates frequently. The slightest touch causes a spasm. 8 P.M. Chloroform discontinued. Pupils contracted, respirations 52; pulse 148. Muscles relaxed; occasional spasms. 9.30 P.M. Patient has just had a general tonic spasm lasting about thirty seconds, more marked in the lower extremities. Cold perspiration; pulse 156, resp. 44. Tongue was badly bitten during the spasm. 9.45 P.M. Left pleurosthotonos. After the convulsion the pulse was so feeble that it could not be counted. Injected ℥ss. brandy. 10 P.M. Pulse 64. An attempt to drink caused a convulsion with right pleurosthotonos. Finger-nails blue, face cyanotic. 10.12 P.M. Another tonic spasm. Pupils rather larger. 10.15 P.M. Another convulsion; cyanosis; death

Post-mortem examination showed intense congestion of the envelopes of the brain and spinal cord. The heart was enlarged; there were signs of a recent slight adhesive pleurisy. The kidneys were large, hard, and (like the other abdominal viscera) greatly congested.

The points in this case to which I would call attention are, that although the patient's condition improved at first after he had taken 6¼ grains of the extract of calabar bean in ten hourly doses, the improvement was not maintained although full doses of the drug (½ to 1½ gr.) were given frequently; and secondly, that the respiratory trouble was due to spasm of the muscles of expiration and not to spasm of the diaphragm. The inspiratory movement was arrested suddenly and the air violently expelled.

The physiological effect of the calabar bean, although evident, was at no time very marked, and it is possible that the preparation had deteriorated by keeping. While the promptness with which the drug deteriorates may explain its failure in this and other cases, it is none the less a legitimate objection to its employment under circumstances where any lack of power on its part will prove fatal.

ATTACHMENT OF THE APPENDIX VERMIFORMIS TO THE POSTERIOR PART OF THE ABDOMINAL CAVITY, FORMING A LOOP.

EIGHTEEN INCHES OF SMALL INTESTINE CROWDED THROUGH THIS LOOP.—STRANGULATION AND DEATH.

By H. W. HENDRICKS, M.D.,

HYDE PARK, VT.

On the morning of September 17th I was called to see A. C., aged twenty-five years, who I was informed had been suffering from severe colic for about four hours. On arriving at the house, I found the man suffering severe pain in the region of the umbilicus, but having neither fever nor tenderness about the bowels. I gave him a few drops of chloroform and a hypodermic injection of morphia, which quickly relieved nearly all of the pain. I then gave directions to use no cathartic, but to move the bowels with enemas. After using several of these with no good results, we decided, as there was very little pain, to try some mild laxative. Accordingly a dose of castor-oil was given, which was retained on the stomach for about three hours, when it was vomited. This seemed to increase the pain and vomiting somewhat, and as twenty hours had elapsed since my first arrival, with no movement from the bowels, and the patient suffering severe pain at this time, I asked for counsel. Dr. Randell was called on the morning of the 18th of September. His desire was to try the treatment for inflammation of the bowels—calomel and opium. This treatment was continued for forty-eight hours, when the pain and tenderness were very much allayed. At this stage, three days after the first attack, as the patient was quite free from pain, with very little irritability of the stomach, we again tried to move the bowels with vegetable cathartics and enemas. The bowels moved a little twice, but the cathartics caused some sickness at the stomach. During the first six days the pulse was good; the stomach not very irritable, but some tympanites about the bowels; also some tenderness. On the seventh day the pulse suddenly became feeble, and the extremities began to grow cold.

At this stage Dr. Hall was called in. He advised an enema of mucilage and croton oil, which was tried with no effect; also a large dose of calomel was given, with like result. The patient continued to fail notwithstanding stimulants were freely used, and died at the end of the eighth day.

Autopsy twelve hours after death.—Decomposition fast taking place. Bowels considerably distended with gas. Peritoneum somewhat inflamed. Stomach nearly empty. Small intestines filled with gas. Large intestines empty. The appendix vermiformis was drawn across the bowel at the junction of the ileum and cæcum, and attached to the posterior wall of the abdomen, a little to the right of the spine, forming a loop about six inches in circumference. Through this loop about eighteen inches of small intestine was crowded, and this plainly showed the cause of the colic from which the patient suffered at first; also the cause of the inflammation of which he finally died. I omitted to mention one thing in the treatment, which was attaching to the nozzle of a syringe a flexible tube fourteen inches long, and introducing it into the rectum and colon, and giving enemas through this.

Dr. Brown-Séquard is advertised in *The Lancet* as intending to resume practice in London.

Progress of Medical Science.

Gastrotomy and Gastrostomy.—Dr. J. H. Pooley, of Columbus, Ohio, in a very complete article written upon this subject, published in the early part of the summer, defines gastrotomy to be the opening of the stomach for the removal of foreign bodies which have been swallowed accidentally or intentionally, and which by their bulk or form are not liable to pass through the intestines and be discharged per anum, or got rid of by vomiting, or which give rise to immediately severe symptoms. Gastrostomy he defines to be an opening made directly into the stomach, and the establishment of a permanent fistula for the introduction of nourishment in cases of inveterate stricture of the œsophagus, whether from cancer, the cicatricial narrowing following the ingestion of scalding or corrosive liquids, or from any cause where death threatens, and life may be prolonged. He mentions two cases of accidental gastrotomy taken from *Turner's Surgery*, published in 1736, and quoted from older sources, one as far back as January, 1632. A table is then given of eleven cases of gastrotomy performed for the removal of foreign bodies, dating from 1613 up to 1856. All but one of these cases recovered. He also gives a similarly arranged table of eighteen cases of gastrostomy, performed for stricture of the œsophagus, from 1849 to 1872. The result in all these cases was death. He does not think this necessarily proves the operation is always to be unsuccessful. Mr. Bryant's views are his own, when he says one cause of the failures thus far has been the putting off the operation until so late a period. It may turn out to be a parallel operation with colotomy, which was unsuccessful until it was undertaken at an earlier stage of the disease. Dr. Pooley favors Mr. Bryant's operation—that of making an oblique incision along the cartilages of the ribs, and extending pretty high up toward the xyphoid cartilage.

This paper is extremely interesting, in view of the following successful case, of which the history has just reached us:

A Successful Case of Gastrostomy.—At the meeting of the *Académie de Médecine*, in Paris, on October 24th, M. Verneuil reported the first really successful case of gastrostomy that has yet been recorded. M. Verneuil stated that the operation had previously been performed fifteen times for simple and malignant strictures of the œsophagus, but had always been followed by death. Dr. Pooley, of Ohio, however, as alluded to above, has collected eighteen cases, in one of which the patient lived thirteen days after the operation. M. Verneuil's patient, a boy seventeen years of age, swallowed by mistake a solution of caustic potash, on February 4, 1876. For two weeks he suffered from the symptoms of an acute œsophagitis, after recovering from which he had great difficulty in swallowing. This difficulty constantly increased, and on May 24th, he was admitted to M. Verneuil's ward at the Pitié. He was then exceedingly emaciated, could scarcely swallow anything, and was almost dying of starvation. Catheterism revealed an impassable stricture, two and three-quarter inches below the upper orifice of the œsophagus. External œsophagotomy was consequently out of the question. The patient was fed per rectum, and futile efforts to pass the stricture were repeatedly made. One day the patient stated that he could swallow a little fluid at night, although deglutition was absolutely impossible

during the day. Convinced by this fact that there was muscular spasm in addition to cicatricial stricture of the œsophagus, M. Verneuil administered to the patient two drachms of chloral per rectum, and as soon as the narcotism was complete, the stomach-tube was passed through the stricture without much difficulty. Although the passage of the catheter caused intense pain, the patient was, for some days afterwards, able to swallow bouillon and pap. The catheterism was repeated every second day, until July 10th, when the stricture again became impassable. The patient after this rapidly became weaker in spite of the nutritive enemata, and finally gastrostomy was determined on, as there was danger of death from inanition. On July 26th, he was placed under the influence of chloroform, and an oblique incision about two inches in length was made parallel to the cartilaginous border of the false ribs. The skin, subcutaneous cellular tissue, muscles, and peritoneum were successively divided, and then the stomach presented itself in the gaping wound. This organ was at once transfixed and held in the wound by two long acupuncture needles, and this was done so rapidly that the abdominal cavity was not exposed to the air for more than fifteen or twenty seconds. Fourteen metallic sutures were then passed through the skin, parietal peritoneum, and wall of the stomach; the sutures were about one-quarter of an inch apart, and were twisted over a tube of lead and a button. The acupuncture needles were then withdrawn, and a small incision made through the wall of the stomach, which had by that time assumed a purplish color in consequence of the constriction by the sutures. The wall was remarkably thick, much more so than it usually is in the cadaver. Two small jets of blood followed the incision, but they were immediately controlled by the application of hemostatic forceps, which were left in position until the evening. The incision was not more than one-third of an inch in extent, just large enough to admit a large gum catheter, which was secured in position by tapes and collodion applied over the abdomen. While applying the sutures the parietal layer of the peritoneum was secured by a dozen or more pairs of hemostatic forceps, which were left on until all the sutures were in place. The operation was exceedingly simple, and was attended by no untoward accident. The antiseptic method was strictly followed, all the instruments, etc., having been steeped in a solution of carbolic acid, and a carbolized spray kept constantly playing on the wound. For some days subsequent to the operation the patient complained of circumscribed pains in the left hypochondrium and right shoulder, and of oppression of breathing from the collodion, and he became jaundiced. There was no fever, however. The sutures fell out spontaneously, and a small portion of the gastric wall, included between the sutures, sloughed so that the opening became larger than at first. The patient was fed through the catheter with bouillon, soups, milk, eggs, wine, etc., etc. On August 20th he was able to get up, and on September 10th the fistula was rounded and encircled by a border of mucous membrane. He had then completely regained his strength and energy. On August 18th he weighed seventy-five pounds, and on September 14th he weighed eighty-six pounds. He experiences hunger and feeds himself with all sorts of food. After injecting this food the flow of saliva is increased, but as the stricture of the œsophagus remains impassable he is obliged to spit it out. It is probable that in course of time the cavity of the œsophagus will be completely obliterated, and the patient will consequently be obliged to feed himself through his gastric fistula during his entire life.—*Gazette Médicale de Paris*, October 28, 1876.

Transmission of Syphilis.—Dr. R. W. Taylor, of this city, states that he has met with four cases in which syphilitic fathers procreated syphilitic children, while the mothers remained healthy. These cases were all most carefully studied, and the doctor thinks that there can be no doubt of the correctness of his conclusions. In several other instances, he was personally satisfied that the fact was the same, but as the cases were not sufficiently complete for publication, he does not take them into consideration. At the present time Dr. Taylor makes public the details of two of the above cases, of which the following is a synopsis. In the first case a man was infected with syphilis a year before his marriage, but under a mercurial treatment of about six weeks' duration all visible manifestations of the disease disappeared, and he stopped treatment. His wife was perfectly healthy and never presented any symptoms of syphilis; but one year after her marriage was delivered at term of a dead child, which presented no perceptible lesions. She subsequently gave birth to four children, all of whom were syphilitic, and all died within a few months of birth. During this time the father was suffering from periosteal pains, ulcers, and a scaly skin affection. In 1866 he sought relief at a dispensary, and was ordered biniodide of mercury and iodide of potassium, which he continued to take for nearly a year, when he became apparently well. In 1867 his wife gave birth to a healthy child which is still living, and never presented any evidences of syphilis. In 1869 the husband again began to suffer from periosteal pains. At this time he impregnated his wife, and she gave birth to an apparently healthy girl. Shortly after birth, however, the child became sick, and was covered with an eruption. She was brought to Dr. Taylor for treatment, and he found the body and extremities covered with a copious roseolous syphilide, with numerous typical syphilitic papules interspersed among the roseolous patches. The papules about the anus were excoriated. There was also intense ozæna. The mother was perfectly healthy. Repeated and most rigid examinations revealed no evidence of syphilis, past or present. Dr. Weir also examined her and pronounced her perfectly free from syphilis, past or present. The father, however, gave a good history of, and presented at the time, many signs of syphilis. The child was treated by inunctions and recovered. The father was put on a mixed treatment (mercury and potash), and the mother was given iron and quinine In 1872 she gave birth to a boy, who was and has since remained perfectly healthy.

In the second case a healthy woman was married to a healthy man in 1862; in the three years following she gave birth to three perfectly healthy children. In 1865 the husband had a chancre, which was followed by a general eruption. He was treated for six weeks, when he considered himself cured. In 1866 his wife gave birth to a boy, who soon became sick, puny, and covered with a skin disease. The history of anal condylomata and ozæna could be made out. In 1869 she had a girl, which soon became sick in the same way as the boy. When the child was four months old it had a squamous, coppery eruption about the mouth, and a roseolous and papular eruption on the body and the soles of the feet. It had also the typical senile facies. At this time the boy born in 1866 had interstitial keratitis, Hutchinson's teeth, and an umbilical hernia. The mother was in blooming health, and the most careful examination failed to reveal any

e vidences of syphilis. In fact, between that time and 1875 she was repeatedly examined, but always with the same result. The husband at that time presented scattered papules on the body, and a gummatous infiltration over the left eye. He was kept under treatment for several months, and in 1872 his wife gave birth to another perfectly healthy child.—*Archives of Clinical Surgery*, September, 1876.

Feeding by the Nose.—Mr. Clement Dukes finds this mode of feeding very useful in mania, delirium tremens, diphtheria, stomatitis, cancrum oris, etc. The apparatus required is one yard of rubber tubing, of one-eighth inch bore, which is to be inserted into a bottle, so that the tube almost reaches the bottom. It works on the syphon principle. The patient lying on his back without a pillow, the tube is exhausted of air and the free end is passed just within the nostril and retained there with the left hand while the right has the tube closed by the pressure of the finger and thumb. Alternate compression and relaxation of the tube allows an ordinary mouthful of the fluid to escape at a time. Mr. Dukes makes use of the same apparatus for washing out the nasal cavities having the head bent forward over a basin.—*The Lancet*, Sept. 16, 1876.

Reports of Hospitals.

BELLEVUE HOSPITAL.

NOTES OF PRACTICE AND PECULIARITIES OF TREATMENT.

INTERMITTENT FEVER—CINCHONOIDIN.

Of late several cases of intermittent fever have been treated by the use of cinchonoidin as a substitute for the sulphate of quinine. The size of the doses has been about double that required of quinine, and it cured the disease. It had been thought quite possible that the cinchonoidin produced some irritation of the stomach; at least some nausea, and a burning sensation in the organs had been complained of by the patients while taking the remedy, and had disappeared when the remedy had been discontinued.

DOUBLE QUOTIDIAN INTERMITTENT.

A case of intermittent fever of this form was seen, and it was interesting because of its rare occurrence, and also because it has been claimed to be the only disease, except typhoid fever, that gives a double thermometrical curve in a single day.

UNUSUAL VARIETY OF LATERAL CURVATURE.

The interest in the case, as far as the curvature was concerned, consisted in the fact that the lower portion curved to the *left* and the upper portion to the *right*, which is just contrary to the ordinary form seen in young girls. The patient was a rickety boy aged seven years.

GONORRHŒA—CAUTION REGARDING THE SOURCE OF THE DISEASE IN CERTAIN CASES.

Epitome of History.—A man contracted gonorrhœa; supposed he was entirely cured; subsequently married; within a few days found himself suffering from gonorrhœa again; became frantic regarding the supposed infidelity of the woman he had married; was examined and found to have stricture; was informed that his gonorrhœa was simply relighted from his ancient trouble; became exceedingly anxious then lest he had communicated the disease to his wife; it was communicated to the wife, showing that gonorrhœa may be sub-developed, and that, after it is sub-developed, it has the power to contaminate a healthy individual.

A NEW GUIDE IN THE OPERATION OF EXTERNAL PERINEAL URETHROTOMY.

The case was one in which no instrument could be introduced to serve as a guide to the urethra, so the operator took for his guide the *centre of the pubic arch*. This anatomical point was regarded as a safe guide to the urethra while making the incision in cases in which it became necessary to operate without other aid.

TUBERCULAR MENINGITIS — PHTHISIS — TEMPERATURE NORMAL.

The patient was a young man, æt. twenty years, who had been sick four or five days, and gave the following symptoms: There was marked impairment of the intellectual faculties, the pupils were dilated, and not sensitive to light; there was moderate delirium; the abdomen was retracted; the cerebral patch, that is, the red line developed after drawing the finger across the abdomen, was well marked, the white line enduring *four* seconds and the red line which followed lasting from *two* to *five* minutes. The temperature was normal, and that was interesting from the fact that there were well-marked evidences of phthisis at the apex of the left lung and less marked at the top of the right. The case then illustrated the fact that phthisis might occur without elevation of temperature, and not only that, but that the temperature might remain normal with tubercular meningitis developed in the same patient. The pulse was slow, sixty to seventy, scarcely perceptible, and irregular; a patient near him had heard him complain of headache when first admitted; there was no history of vomiting; he had had hemorrhage from the lungs, three or four ounces, since the meningeal attack; there was marked rigidity of the muscles of the neck; involuntary discharge of urine; but no rigidity of the muscles of the extremities.

The treatment in the case consisted in applying cold to the head; securing a loose movement from the bowels daily, because of the tendency to pulmonary congestion; quieting by the use of morphine, if restless; diminishing cerebral irritability by the use of bromide of potassium in thirty-grain doses every four hours; blister to the nape of the neck; and nourishment, chiefly milk. The question arose, why not give a cathartic? The answer was, that if the case was one of tubercular meningitis, depletion was to be avoided; and besides, the prognosis in these cases was so exceedingly unfavorable it was scarcely worth while to irritate the patient by such procedure.

A PECULIAR ABDOMINAL TUMOR.

The case was one in which the symptoms called for a physical examination of the abdomen. Upon inspection, nothing abnormal was noted. Upon palpation a well-defined tumor, not specially painful upon pressure, could be mapped out at the upper portion of the abdomen and in the median line, somewhat irregular in shape and having a distinct outline, and a feel as though something solid was under the fingers. Upon percussion, however, it was perfectly evident that intestines were beneath the tumor, and the conclusion was reached that the apparent tumor was in the abdominal walls and not in the cavity, and that it was simply a peculiar condition of the recti muscles. Appearances are deceptive even in diagnosticating abdominal tumors; hence the necessity of resorting to every known means for eliminating errors.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, November 25, 1876.

OUR WATER SUPPLY.

ALTHOUGH the copious autumnal rains of the past few days have quieted all present fears concerning the scarcity of drinking-water, the great possibility of a repetition of the experiences of the past summer is such as to give to the subject a more than ordinary interest. As is natural under the circumstances, the daily papers have been filled with all sorts of suggestions tending to remedy defects in the present system of supply. It is useless to refer even to the majority of the plans except in a general way as bearing upon the sanitary requirements of the day.

If we examine the present system of water-supply for New York, we have reason for congratulation that it is so well calculated, under ordinary circumstances, for meeting the wants of so large a population. It is only in view of such emergencies as we have experienced during the past few months, and in view of the constantly increasing number of consumers, that there is any reason for concern in the future. There appears to be no doubt among experts that the water-shed of the Croton is sufficient of itself to supply all possible demands which may be made upon it for years to come. So the real difficulty seems to be in the utilization of reasonable measures to increase the storage capacity of the water and to prevent its waste by the consumers. There does not seem to be any question that an increase in the number of reservoirs and the multiplication of dams will effectually overcome the first difficulty, and that an adoption of the meter system, especially in those localities where there is known to be a great waste of water, will, to a great extent at least, obviate the latter.

The proposition to tap the Hudson River near its source for the extra amount of water-supply is not to be seriously considered, except as a last resort. As a rule no towns should depend for their water supply upon navigable rivers, or any other streams liable to sewage contamination.

Although it is claimed that rivers so purify themselves by the constant changes of tide that the dangers of sewage admixture are reduced to a minimum, there is always more or less danger with the growth of towns on their banks, especially on the smaller rivers, of a pollution which may in the end be seriously detrimental to health. The great advantages of abundance in supply which a river affords is in a great degree counterbalanced by the liabilities to the dangers alluded to.

In a recent article upon the subject of river pollution, the *Lancet* says:—"It has long been patent to us that the possibility of restoring our rivers to such a condition that they would ever be fit and wholesome sources from which to supply our towns with drinking water, must be abandoned." This will doubtless, for very obvious reasons, be the experience in America, when, as in Great Britain, it may be too late for a remedy.

In respect to the Croton, however, we have all the advantages with none of the ordinary drawbacks. As such, our system is a model of its kind, and commends itself to every city or town corporation for imitation.

The time seems to have arrived when the necessities for studying the water-supply of towns is acknowledged all over the country. The well-system, which prevails in our smaller villages, is acknowledged to be inefficient and dangerous. The latter objection is more and more apparent in proportion to the increase of population and the attendant soil saturation. As the different towns enlarge, and as the growing scarcity of trees yearly increases the liability to prolonged drouths, the different corporations must secure to themselves such sources of water-supply as shall be not only abundant but pure. This has already been very satisfactorily done in several of our large cities, Philadelphia perhaps excepted, and is being done by some of the larger towns throughout the country. In the majority of these instances the sources are, as they should be, lakes, artificial or natural, in the vicinity of the towns to be supplied.

ABUSES OF MEDICAL CHARITY.

THE large number of students attending lectures in this city creates a want of clinical material for teaching which cannot fail to act unfavorably upon the young physician who depends upon his practice for his daily bread. We have already heard many complaints against the almost wilful carelessness of some of our medical teachers, in admitting improper persons to their clinics, and in prescribing for and operating upon patients who were able to pay a fee. The mere fact that a case may be interesting to the medical class is by no means a sufficient reason that it should be treated for nothing. The exercise of a little discrimination on

the part of the college professors and hospital attendants would go a great way towards correcting a shameful abuse of medical charity. It would appear, however, that many of the clinical teachers, in their efforts to fulfil an implied contract with their students, are not equal to the emergency.

THE COINCIDENCE OF TWO PERSONS HAVING THE SAME IDEAS, AND THE SAME LANGUAGE TO EXPRESS THEM.

THE *Holley Standard*, of this State, contains an article on the health of Philadelphia, which, as it is claimed as an original one by a physician who publishes it, affords an interesting example of the law of coincidences. That the writer in question should have visited Philadelphia during the Exposition is hardly remarkable; that he, being a physician, should have inquired into the sanitary condition of Philadelphia, was quite natural; but that he should have appropriated the facts gathered by us, using, in many instances, our own language to give them his authoritative expression, is a rare illustration of the manner in which two minds can run exactly in the same groove. We take no small delight in endorsing his statements, as we have special reasons for believing that they are well founded; our only regret being that they were not published in time to save us the trouble and expense of obtaining them independently. As it is, the writer has denied himself the opportunity of receiving a full acknowledgment of the benefits we would have derived from "the special pains" which he has taken "to inform himself in reference to this matter" of the health of Philadelphia. The fact of his being a little behindhand in the writing of his letter has forced him, as a matter of duty to his patrons, to publish his views in his local paper, and in this case the end may justify the means.

At first, we were inclined to entertain the idea that the doctor had read our article on the subject before he wrote his letter to the *Standard*, but we at once saw that even a vague allusion to its possibility would have seriously interfered with our purpose of illustrating a principle in the law of independent thought.

Reviews and Notices of Books.

A MANUAL OF PERCUSSION AND AUSCULTATION OF THE PHYSICAL DIAGNOSIS OF DISEASES OF THE LUNGS AND HEART, AND OF THORACIC ANEURISM. By AUSTIN FLINT, M.D., Professor of the Principles and Practice of Medicine, and of Clinical Medicine in the Bellevue Hospital Medical College, etc. Philadelphia: Henry C. Lea. 1876.

THIS manual has been written upon a plan which the author believes to be most conducive in making it a book useful for the medical student in his daily study of the subject, and also for the practitioner who wishes a convenient manual for reference. The first object has been to throw aside needless refinements, and to treat the subject in the simplest manner possible.

The discussion of the mechanism of signs has been waived, and their destructive characters considered by an analysis especially based on variations in the intensity, pitch, and quality of sounds. Again, the author has endeavored to impress the fact, that the significance of physical signs relates to physical conditions, and that to a proper understanding of the signs, the condition must be thoroughly understood, as well as the signs of health. In other words, the student or practitioner, if he would have a correct appreciation and knowledge of physical signs as obtained by palpation, percussion, auscultation, etc., must have a thorough knowledge of the health-signs and the pathological changes, or changes in physical condition, which may give rise to changes in those normal signs.

Dr. Flint's Manual is divided into eight chapters. The first is introductory. In the second and third, percussion in health and disease is considered. The fourth and fifth chapters are consumed with auscultation in health and disease. The sixth is devoted to physical diagnosis of diseases of the respiratory system, and the physical conditions of the heart in health and disease are considered in the seventh chapter. The book is concluded with a chapter on the physical diagnosis of diseases of the heart and of thoracic aneurism.

A manual from this eminent author and teacher upon a subject to which he has given especial attention will be received with favor by the profession.

THE TREATMENT OF ANTEFLEXIONS OF THE UTERUS. By ELY VAN DE WARKER, M.D., Syracuse, N. Y. Reprint from New York Medical Journal, June, 1876. New York: D. Appleton & Company, 549 and 551 Broadway. 1876.

DR. VAN DE WARKER'S article is an argument in favor of the use of intra-uterine stem-pessaries with adjustable intra-vaginal support in the treatment of uterine displacements, or, as he calls them, "deformities." It contains wood-cuts of an instrument which he has devised for the treatment of anteversion. He does not claim that the instrument is perfect, but, with only a commendable degree of assurance, states that it has served a good purpose in the cases which are reported. There has been quite a diversity of opinion regarding the use of the intra-uterine stem instrument, and it seems that the Doctor belongs among those who regard it as safely available.

We notice one sentence in Dr. Van De Warker's paper that is worthy of quotation. It is the following: "The point in the mechanical treatment of anteversion or flexure, or, in fact, the opposite form of uterine dislocation which these cases are designed to illustrate, is that we cannot place our reliance upon any one form of instrument." If those who condemn in general the use of intra-vaginal supports for the uterus, such condemnation usually, perhaps always, being the result of ignorance of the principles which govern their adjustment, would carefully cultivate a knowledge of the fact that no single instrument is adapted to the treatment of any case, they might at least become convicted if not converted.

A MANUAL OF MIDWIFERY. By ALFRED MEADOWS, M.D. (London), F.R.C.P., Fellow of King's College, London, etc., etc. Second American Edition. Philadelphia: Lindsay & Blakiston, 1876. 8vo, pp. 484.

THIS is the second American from the third London edition. With the additions which the recent advances in the obstetric art have made necessary, the present edition is a model of its sort, giving to the student and practitioner a complete, trustworthy, and practical manual. The illustrations are quite numerous, well selected, and of more than ordinary execution.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, October 11, 1876.

DR. C. K. BRIDDON, PRESIDENT, IN THE CHAIR.

LUMBRICOIDS PASSED THROUGH SINUS ABOVE CREST OF RIGHT ILEUM.

DR. V. P. GIBNEY:—The following case, from its triplex nature, seems sufficiently interesting to present with a history and description which possibly may seem long, but which I shall endeavor to condense as as far as practicable.

Joseph Moran, two and a half years of age, residing in Brooklyn, was brought by the mother to the out-door department of the Hospital for Ruptured and Crippled, July 19, 1876. I found almost complete palsy of the right lower extremity, voluntary power being present only in the flexors of the toes; an open sinus at the crest of right ileum, about three inches removed from the sacro ilial junctions, with a thin serous discharge therefrom; two cicatrices immediately to the right of the sacro-ilial junction, at which points, so the mother states, small spiculæ of bone have from time to time been exfoliated. The worm which is presented this evening was brought along, and the mother, with some degree of satisfaction, stated that this had protruded through the sinus only a few days before, and was seized by the child himself, who removed it with ease. During the past six months four other worms have been removed. I learned, while questioning as to the discharge of fecal matter, that for a day or two subsequent to the passage of a lumbricoid, the discharge is yellowish, and a little more fetid than usual. The general health of the little patient was good. The history, as obtained, is that in September, 1874, both lower extremities were suddenly paralyzed, the attack coming on like that of infantile paralysis. In December of the same year a lumbar abscess formed, was subsequently opened, and continued discharging up to the present time. A surgeon saw the case in May, 1875, and probed the sinus. The five intestinal worms have passed, per sinus, since that time. When the first one was passed, considerable hemorrhage occurred. The treatment adopted at the hospital was confined to the paralysis. The child has attended the dispensary regularly since July 19th, and the last note made was on September 26th, when the appetite was reported as enormous, the general health was excellent, and the discharge from the sinus slight.

Stated Meeting, October 25, 1876.

DR. CHARLES K. BRIDDON, PRESIDENT, IN THE CHAIR.

SARCOMA OF TIBIA—SCLERODERMY OF RIGHT SIDE—AMPUTATION OF LEG.

DR. JOHN W. HOWE presented a specimen of sarcoma of tibia, scleroderma of right side, with the following history:—

Maggie Sealy, aged nine, was admitted to St. Francis' Hospital in April, 1876. In December, 1873, she fell from the bed and bruised the inner side of the right knee. It soon after became swollen and painful; the integument over the injured part was roughened and harder than natural. In about four weeks the roughening and induration extended as high as the groin; then it travelled downwards along the inside of the leg to the ankle. Some pigmentation of a brownish color accompanied the induration, but was not confined to the diseased parts. At the end of four months from the accident the sclerosis had extended up the small of the back as high as the scapula. There was a small spot on the chin, and over the right side of the scalp there was considerable pigmentation. The affected integument had the appearance of cicatricial tissue in many parts. It was colder than the healthy skin.

No hereditary taint could be found on examination in the hospital. The patient was found to be exceedingly emaciated and weak; the *sclerionxis* was about the same as described above. Over the inner side of the leg, extending upwards almost five inches from the inner malleolus, there was a large ulcer covered with flabby granulations, bathed in thin fetid pus. She complained of constant pain of the sore. The thigh was flexed on the body. The flexor tendons were exceedingly rigid, and seemed to be incorporated in the indurated integument. The ham-string muscles were in a similar condition.

Cod-liver oil, quinine, and iron were ordered, and a solution of carbolic acid applied to the ulcerated surface. Rapid improvement in her general health took place. She gained flesh and strength, and was able to go about the ward with ease. This improvement continued up to August last, when an enlargement of the leg corresponding to the ulcer was noticed. Both bone and soft parts seemed to be involved. A large fungous mass grew rapidly out from the seat of the ulcer. It had an extremely fetid odor and was covered with serous pus. There was constant and intense pain shooting up and down the leg, as well as over the tumor.

As the child was running down rapidly, it was decided to amputate. The operation was performed on Sept. 29th, through the middle of third of the femur. I made lateral skin flaps; the inner one from the indurated integument, and the external one from healthy tissue. The flaps were brought together in the ordinary way, but in a day or two it was found necessary to take out the sutures on account of the sloughing of a small portion of the upper angle of both flaps. Since the operation the little patient has experienced great relief; is able to be up and dressed every day; the stump is also doing well; but owing to the profuse growth of granulations, perfect union has not yet been attained.

When the soft parts were cut away from the bones of the amputated leg, it was found that at the base of the fungous mass there was a corresponding enlargement of the tibia, about four inches in length, irregular in shape and very porous. The os calcis-astragalus and some of the metatarsal bones were soft, carious, and contained pus.

The microscopical examinations of the growth on the tibia do not seem to agree. Dr. Edel found nothing but new bone formation in a state of atrophy, with a few marrow cells. Drs. Delafield and Stillmann found large masses of spindle-shaped and round nucleated cells, and pronounced it a sarcoma of the most malignant type. Dr. Heitzmann, judging merely from the gross appearances of the specimen, agreed with Dr. Edel, but on hearing the history of the case changed his mind.

DR. GIBNEY remarked that he had a case similar to the one related, the particulars of which he had already presented to the Society. The patient was eight years of age, and had a patch upon the chin, to the left of the symphysis, with a deep cicatrix in its centre as if made by some sharp instrument. The mother stated that the same condition of integument

existed over the left nates, the posterior surface of the calf, and the middle of the thigh. This condition of things had then existed for three years without any special change, and the child was merely brought to Dr. G. to be treated for lameness. The left thigh was one inch smaller in circumference than the right.

THE DEVELOPMENT OF SARCOMATOUS TUMORS.

Dr. C. Heitzmann presented microscopic specimens of sarcoma tumors grown in the subcutaneous tissue and in glandular organs, such as the liver, the submaxillary salivary gland, in order to demonstrate the changes in the epithelial elements produced by the growth of sarcoma. These changes had been studied in his laboratory by Dr. Rudolph Tauszky, of this city, and described in the Transactions of the Imperial Academy of Sciences of Vienna, vol. lxxiii., 1876. The changes generally are of two kinds; first, those which can be considered as being simply inflammatory ones; and secondly, those which lead to the production of sarcoma-elements from epithelial bodies. Changes of the first kind were to be observed in the rete mucosum of the skin, covering a sarcomatous growth, without having however undergone any ulceration; here the melting of the cement substance takes place, and new-growth of indifferent elements arises through the increase of the living matter—the granules within the protoplasm as well as in the spaces belonging to former cement-substance, from the uniting threads, the so-called thorns of Max Schultze. This was one proof more that these threads really were formations of living matter. Changes of the second order, the transition of epithelium into the sarcomatous tissue, could be demonstrated in glandular organs. After the solution of the cement-substance endogenous new-growth of living matter took place, this giving rise to new elements, which after having undergone a partial change into basis-substance, were perfectly identical with the elements of the original tumor. Thus the protoplasm of genuine epithelial formations directly changed into that of the sarcoma, and only scanty remnants of the epithelium might be met with in glands, for instance in the testicle, if the seat of sarcoma, in which kind of tumors, as universally acknowledged, no formation of epithelium took place.

EXSECTION OF HIP.

Dr. Briddon presented a specimen of exsection of hip, with the following history prepared for him by Dr. A. F. Buhler:

William Nienberger, æt. 2, New York. Admitted Oct. 5th. Service of Dr. Briddon.

History.—Father died of consumption; history on mother's side good. Up to the age of eight months the child, according to the mother's statement, was perfectly healthy. At that time the submaxillary glands on the right side began to enlarge, became inflamed, and were attended by the formation of abscesses. Ten months ago, when the present disease made its appearance, the child, accepting the mother's history, was enjoying good health. There is no history of an injury being sustained. The first symptom to attract the attention of the mother was, that one morning on getting out of bed the child began to limp. This limp lasted for an hour or two, and then disappeared. The next morning it again returned. The mother also noticed that the child in walking would rest his diseased limb on the tip of his toes. About three months ago the child became very restless and feverish at night. He would cry during a great portion of the day, and point to his hip with an expression of pain. At this time an abscess formed on the outer portion of the thigh, at the junction of the upper and middle third.

On examining the patient, it is found that the nates are broadened and flattened. The gluteo-femoral crease on the affected side is lower and less distinct than on the other side. The leg is flexed on the thigh everted and abducted. There is an apparent shortening, but on measuring both limbs from the anterior superior spinous process to the inner malleolus no difference in the length of the two can be detected. On making pressure over the great trochanter, and thus bringing the articular surfaces of the bones in contact, or by rotating the limb, an expression of pain is excited on the child's countenance. A sinus is also found at the junction of the middle with the upper third of the thigh on the outer surface.

October 16th.—Operation by Dr. Briddon.—The sinus situated on the outside of the thigh was opened to its termination; it communicated with the anterior surface of the articulation, the capsular ligament of which appeared to be entirely destroyed, and this disposition of the articular extremity of the sinus made the separation of the soft parts somewhat tedious, it being necessary to work from before backwards instead of in the opposite direction. In attempting to turn out the head of the bone a separation of the superior epiphysis took place, leaving the head "in situ;" a chain-saw was carried round the exposed end of the diaphysis and about three-quarters of an inch removed; the head was then removed without further difficulty.

The acetabulum was nearly filled with granulation tissue, but there was a denuded point on the posterior border of the ischium that was scraped with Simon's spoon. On inspecting the parts removed it was at first thought that a separation at the epiphysis had occurred before the operation; but a more careful examination determined that such lesion had been caused in the effort to dislodge the head.

It was difficult to decide from appearances whether the disease had begun on the surface of the articular head, or whether the joint had become involved secondarily from disease spreading progressively from the cancellous structure; the under surface of the neck was hollowed out into a cavity that communicated with the joint. The head of the bone was divested of cartilage, save at its periphery. After the very trifling hemorrhage had ceased, the patient was placed upon a Sayre's cuirass, and the wound resulting from the operation was then painted over with balsam of Peru, and its cavity filled with oakum. The child readily recovered from the shock of operation, but passed a rather restless night. Patient's temp. in the morning following the operation, 101¾°. Evening temperature, 100°.

October 18th.—The dressings were to-day removed, and on inspecting the wound it is found to be in an excellent condition, discharging pus pretty freely. The dressings were again renewed, with orders to have them changed daily.

October 24th.—Healthy granulations now fill up the lower portion of the wound. Patient's temperature has never exceeded 101¾°, his appetite is good, his sleep is undisturbed, and his general condition excellent.

A UNIQUE CHEST WOUND FROM EXPLOSION OF A CARTRIDGE—AN INTERESTING QUESTION CONCERNING OPERATIVE INTERFERENCE FOR THE REMOVAL OF THE FOREIGN BODY.

Dr. H. B. Sands presented the anterior portion of the right lung removed from the body of the late Dr.

Thebaud, whose death was caused by the premature explosion of a cartridge which at the time of the accident he was engaged in filling. Although originally of a robust constitution, Dr. Thebaud had suffered from repeated attacks of pleurisy, of precordial pain, and also of dyspnœa, which latter was suspected by some of his medical friends to be due to disease of the heart, aorta, or both. He had been examined by Drs. Leaming, Loomis, and Metcalfe, all of whom had detected a systolic murmur at the base of the heart, and one of whom considered it organic in character. Immediately before the accident the patient was in better health than usual.

The accident occurred on the 12th of October, about 9 P.M., and while the patient, deceased, was seated at his dining-table, in the second story. Immediately after its occurrence the doctor rose and made a desperate effort to reach his bedroom in the story above, and sank exhausted across the foot of his bed, bleeding from a wound in his chest. The little finger of his right hand was also wounded, but the wound was comparatively of little moment. Dr. Sands was summoned immediately afterwards, and arrived at the house at 9.30 P.M. He saw the patient in consultation with several gentlemen who were present—Drs. Briddon, Stimson, Reynolds, and R. W. Taylor. From these gentlemen he learned that Dr. Thebaud was rallying from a profound and dangerous shock; in fact, at that time he was nearly pulseless, and was slightly delirious. On examination, an oblique incised wound of the chest was discovered, a little more than an inch in length, running from above downwards, and from without inwards, directly over the fourth intercostal space, and very near the right side of the sternum itself. From this wound there was pretty active hemorrhage, which evidently came from the interior of the chest. As soon as the patient rallied sufficiently to admit of an exploration of the wound, Dr. Sands introduced the end of the left little finger into it. After passing it in to the extent of an inch and a half, directly backwards, its progress was arrested by soft tissue, and any further attempt at examination, in view of the proximity of vital organs, was for the time abandoned. A subsequent examination, made directly afterwards, the bleeding continuing, revealed a portion of pasteboard cartridge, which was removed. Circumstances admitting, a careful visual examination was made of the wound with a view of finding the source of hemorrhage, which was evidently venous and quite free. The attempt was unsuccessful, and ice compresses, lightly applied, at once controlled the bleeding. After this the patient was placed square around in bed, covered up warm, and left.

On the morning of the following day the patient spat blood, which confirmed a previous suspicion that the lung had been wounded. He had passed a bad night, and expressed his conviction that he was suffering from internal hemorrhage. Auscultation and percussion were practised, as far as practicable, but gave negative results. The heart-beat was feeble, and the old murmur was easily recognized. On the afternoon of this day (Friday) the coat was removed, the patient propped in bed, when auscultation was more satisfactorily performed. It was then that the presence of abundant crepitant râles was discovered. These were thought by Dr. Sands to be due to blood from the wounded lung. Opium was administered for the first time on this day, and continued during his illness, when restlessness, dyspnœa, and pain required it.

On Saturday (third day) he again expectorated blood, and there were signs of commencing pneumonia. No perceptible change on Sunday, except incipient delirium, which continued more or less until death, which occurred by syncope.

On Tuesday (17th) precordial pain, which commenced the day previous, increased, and respiration became more labored. At this time he had a well marked exacerbation of fever, and quinine was administered.

Wednesday (18th) he began to fail markedly, and in the evening he approached absolute collapse. The latter was prevented by the hypodermic injection of brandy and caffeine. From this time he continued gradually to fail, until 3.50 A.M. of Monday, the 20th, when he died.

During his illness his pulse ranged from 90 to 120; his respiration was subject to great variations, ranging from 18 to 55 per minute. The range of temperature on the evening of the accident was 96° F., then it arose to 99° and 101°, remaining thus until the last day, when it sank to 97°.

The autopsy was made by Dr. Finnell, during which the pericardium was accidentally opened by the deputy coroner. On raising the sternum a square piece of the brass cartridge cylinder (1⅛ inches) was found firmly imbedded in the anterior portion of the lung. The right margin of this piece of brass was concealed from view, while the left margin presented a sharp angular edge, which penetrated the lung, made a small perforation into the pericardium, and lay in direct contact with the left ventricle of the heart.

There was universal pericarditis, the diagnosis of which was made during life by Drs. Stimson and Reynolds. Between the parietal effusion and the heart was a quantity of blood, estimated by Dr. Finnell at a pint. The blood did not come from any large vessel, and Dr. Sands was of the opinion that the greater portion was from the lacerated lung-tissue, and had entered through the wound in the pericardium. The right auricle contained a post-mortem clot. No lesions of the aortic valves were discovered, proving the correctness of Dr. Leaming's diagnosis.

The lungs were universally adherent on both sides. The lungs were contracted and found the seat of organic disease.

In conclusion, Dr. Sands discussed the propriety of more thorough exploration of the chest, and the advisability of any attempt to remove the foreign body. He maintained that in Dr. Thebaud's case the circumstances were such as absolutely to forbid a more thorough exploration, and also any attempt to extract the foreign body. Aside from the condition of extreme shock in which the patient was during the greater part of the time subsequent to the injury, the existence of organic disease of the lung, and the dangerous proximity of the heart, were of themselves sufficient reasons for the unjustifiableness of operative interference.

Dr. Finnell next presented the lungs of the deceased. He stated that they were in the condition of fibroid degeneration, the result of chronic pneumonia; that they were universally adherent; and that, although the missile was imbedded in the pulmonary tissue for eight days, no inflammatory changes were noted in its neighborhood. He gave it as his opinion that the hemorrhage in the pericardium was due to the wounding of the vessels on the surface of the heart by the sharp projection of brass against it. He thought that a fresh scratch was made by these means almost at every pulsation. This was, to his mind, also an explanation for the universal pericarditis. During an unfortunate slip of the cartilage knife of the deputy coroner, the pericardium was opened, and as near as could be estimated by sponging up the

blood which flowed from that cavity and squeezing it afterwards in a bowl, its quantity was estimated to be a pint.

Dr. Sands did not think that the quantity of blood in the pericardium was so large; and further, he was of the opinion that the pulmonary tissue around the wound was considerably altered, showing inflammatory changes.

Dr. Leaming said: Dr. Thebaud called at my office in company with Dr. F. N. Otis, some time last spring, and I made an examination of his chest.

There was very little expansion; dry râles over both lungs, varying in size and sonority. In ordinary breathing they were absent under lower angle of scapula, but a slight cough, when the ear was pressed against the chest-wall at this point, would cause to be heard a quick succession of fine râles like crepitus. Beyond the râles true respiratory murmurs could be heard, except at summit of lungs.

There was a systolic murmur at the base of the heart, at the apex, and in the chest-wall over the left side. It was an audible murmur, caused by unequal tension of the chordæ tendineæ, due to slight dilatation of the right cavities of the heart from obstruction of pulmonic circulation by firm interpleural adhesions. I was told that aneurism of the arch of the aorta, stenosis of the mitral valve, and obstruction at the aortic orifice had been diagnosticated. I listened again, but did not find them.

A few weeks afterwards, Dr. Thebaud again called on me in company with Dr. Reynolds. I made another careful examination, which confirmed me in my first diagnosis.

In regard to the soft moist râles heard over the right lung the day before his death, and which had been noticed several days, we have now positive proof of their interpleural origin. *They could not have been formed in the bronchii during the last day, because the lung was filled with exudative matter, and no air could enter.* Air-sacs and bronchiæ were full. But the effort to breathe caused the lung to move bodily in the thorax, stretching the adhesions moistened by fresh exudation, and characteristic râles resulted.

The wound evidently was mortal from the first, and the autopsy justifies Dr. Sands' conservative surgery. If the foreign body could have been found, its removal would have further lacerated the lung, renewing and increasing the hemorrhage, and would have left a ragged opening in the pericardium, which filling with blood would have caused speedy death.

Dr. James R. Wood stated that the wound of Dr. Thebaud was a fatal one from the beginning, and that Dr. Sands was right in stating that no surgeon would have been willing to explore the thorax of the patient with a view to ascertain where the foreign body was. Again, even if the missile could have been reached, the patient's condition during his whole sickness was of itself a sufficient reason to let him alone.

Dr. Briddon thought that the quantity of blood in the pericardium was very much overestimated. He saw only three or four clots, the fluid being evidently the product of inflammation, mixed with blood. In regard to the condition of the patient, the first time he saw him he remarked that, to his mind, it was so critical that he did not expect him to live until morning.

Dr. Wood did not see how the patient could have lived so long with a pint of blood in his pericardium.

Dr. Stimson asked if there was such a quantity of blood in the sac, how it was that pericarditis could be diagnosticated.

Dr. Leaming said that such a diagnosis would have been impossible under such circumstances; and, further, that death would have been sudden.

Dr. Van Geison wished to reconcile the conflicting opinions in regard to the quantity of blood in the pericardium by suggesting that its effusion might have been gradual, and that the critical time was reached when the pericardium was full.

Dr. Robinson gave some of the reasons why the effusion in the pericardium, allowing it to be serous, might not have been in whole, or at least in part, dependent upon the presence of heart-clot.

Dr. Stimson, who had been in constant attendance upon the patient, fully endorsed Dr. Sands' views in regard to the inexpediency of operation. Indeed, the patient was, in his opinion, doomed from the beginning.

Dr. A. C. Post fully corroborated this opinion, maintaining that any operative interference, under the circumstances, would have been positively unwarrantable.

Dr. J. W. Howe asked, in case the patient had not been so prostrated, whether an attempt to remove the foreign body would not have been admissible.

Dr. Briddon thought that dangerous hemorrhage would have been the result. The edge of the piece of brass was so near the internal mammary artery that it was a miracle that it escaped at all.

Dr. Post remarked that in case the patient was in condition, and even in case the cavity of his chest could be seen as through a glass, any attempt to remove the missile would have been inadmissible.

Dr. Reynolds stated that so profound was the shock during the night of the accident, that it was not until the following morning that the temperature could be marked at the lowest register—96½° F.

Dr. Heitzmann stated that, had this case occurred in Vienna, the treatment would have been precisely the same.

Dr. Allin then presented a specimen for a candidate, after which the Society went into Executive Session.

Correspondence.

RADICAL CURE OF EMPYEMA.

To the Editor of The Medical Record.

Dear Sir:—In your impression of October 14, 1876, No. 310, p. 669, I observe an article entitled "Radical Cure of Empyema," extracted from the "*Berliner klin. Wochenschrift.*" Three "desperate cases" of empyema are therein detailed, which were relieved by resection of the rib. In each case incisions sufficient to permit free drainage were made, but the wounds would gradually close, and all the symptoms become aggravated. Upon the removal of a portion of the rib, in each case, improvement was promptly introduced, resulting in each instance in permanent recovery.

While observing with pleasure that the attention of your readers is being directed to this excellent procedure, it is the purpose of this communication to call attention to the fact that this method has long been known and practised in the United States, instead of being an entirely new procedure, as seems indicated by the article alluded to from the columns of your German contemporary.

In the autumn of 1871 I first saw this operation performed by the late Dr. Warren Stone, of New Orleans,

at his clinic in the Charity Hospital of that city. He performed the operation several times during the following winter, the result being quite favorable in each instance. I saw the same operation performed subsequently, in the same institution, by Dr. T. G. Richardson, the successor of Dr. Stone to the chair of surgery in the University of Louisiana. In these instances the point selected for the operation was about an inch posterior to the axillary line. After exposing the seventh or eighth rib at this point, the trephine was applied and a section of the bone removed.

It is claimed for this operation, as stated by the article in your columns, that in addition to furnishing a free outlet for the pus, the size of the cavity is reduced by the approximation of the divided ends of the resected rib.

Experience with this method of treatment, in so far as has been recorded, would certainly justify a more frequent resort on the part of surgeons to resection of the rib in obstinate and severe cases of empyema.

I am sir, very respectfully,

L. S. McMURTRY.

DANVILLE, KY., October 17, 1876.

Medical Items and News.

THE LATE DR. J. S. THEBAUD.—At a meeting of the New York Pathological Society, held Nov. 8, the following resolutions were adopted:

Whereas, It has pleased God to remove from the sphere of his earthly labors our late friend and associate, Dr. J. S. Thebaud; therefore,

Resolved, that by his death we are called upon to mourn the loss of one deservedly eminent in our profession, who has been suddenly cut down in the midst of a career of prosperity and usefulness.

Resolved, that we will cherish the memory of our departed friend, whose high moral and social character won the affection of all who knew him, and whose professional ability and attainments entitled him to universal respect and admiration.

Resolved, that we extend to the family of the deceased our cordial sympathy with them in their bereavement.

Resolved, that these resolutions be published in the medical journals of this city.

H. B. SANDS,
DANIEL M. STIMSON,
J. B. REYNOLDS,
Committee.

THE TREATMENT OF CHANCROIDS BY ACTUAL CAUTERY.—Dr. Henry G. Piffard, of this city, advocates the application of actual cautery for the local treatment of chancroids, as being more thorough and effectual than the usual means employed. The platinum wire is bent upon itself, heated to whiteness, and after being applied, a few drops of carron oil are dropped upon the surface of the sore (*Archiv. of Clin. Surgery*).

TO DESTROY LICE.—The *Med. and Surg. Reporter*, Philadelphia, recommends the following wash to be used once a day for three or four days:

℞. Hydrarg chloridi corrosivi	gr. iv.
Alcoholis	ʒ i.
Aquæ coloniensis	ʒ ij.
M.	

GASTROSTOMY.—Professor Verneuil, of Paris, has just done this operation successfully in a case of œsophageal stricture of traumatic origin. Two months after the operation the patient was up and about, attending to the lighter duties about the hospital (*vid.* page 764).

CONCERNING THE SO-CALLED CENTENNIAL FEVER.—Dr. W. W. R., of Brooklyn, N. Y., writes: "Much has been said and written in regard to the sickness that seems to have very generally attended a visit to the Centennial Exhibition, and, as far as I have seen, the cause has been mainly imputed to a bad sanitary condition of the city, and the grounds of the Exhibition. Whatever that condition may have been and still is (and I have thought the defence made by Dr. Pepper on behalf of the city altogether tenable), I am convinced that the cause of the characteristic fever mainly lies in the presence of *fomites*—certain articles on exhibition, which have been brought from some of the worst plague spots of the earth, of Egypt, Africa, India, Asia, and South America. These have been brought in closed boxes, opened and placed on exhibition for months in poorly-ventilated buildings, chiefly, however, the densely-crammed Main Building. Is herein not a sufficient origin for all the obstinate, typhoid states of the system we have witnessed among patients who have visited the Exhibition?

"It has been argued, however, that there have been more cases of typhoid in Philadelphia this season than for a long time before. And why not? The visits of her citizens to the infected buildings, and their equal susceptibility with other persons, reasonably explain such increase.

"The cases of simple diarrhœa, so very common, can readily be imputed to the drinking of water to which sufferers were not accustomed; new, sweet cider made on the grounds; sloppy, artificial beverages, and eating fancy cakes and the like.

"In view of the foregoing facts, as I believe them to be, I venture to predict that we shall find in the future, more or less, types or grades of fever not heretofore familiar to us in this country—one of the consequences of the great Centennial International Exposition."

Upon the same subject Dr. Julius Fehr, of Hoboken, N. J., sends us the following:

"It is certainly surprising that no one in Philadelphia seems to think of the dangerous proximity of Laurel Hill Cemetery to the Schuylkill. The surface-waters and surface-springs, by the telluric formations of this extensive cemetery, must evidently gravitate to the Schuylkill and produce a contamination of the water, far worse, in fact, than any other. This may lead to explain why there was not 'that centennial fever' during our hot and dry summer, and why it appeared only in fall, when the rainy weather set in, and 'Laurel Hill' was, in fact, after that long interval, anew 'extracted by percolation.'"

DR. J. S. BILLINGS, Assistant-Surgeon U. S. A., and Librarian of the National Medical Library at Washington, is in London, charged with a double mission of securing a collection of missing pamphlets for the library, and of collecting information regarding hospital construction for the benefit of the Johns' Hopkins Hospital, of Baltimore. From accounts in the English journals he has received a flattering welcome.

BARON LIEBIG is to have a statue. More than the necessary amount is subscribed.

SAINT BARTHOLOMEW'S HOSPITAL.—A large part of the school buildings of Saint Bartholomew's will be entirely rebuilt on an extensive scale next summer.

BRITISH ARMY MEDICAL DEPARTMENT.—The Army Medical Service in Great Britain is so much in want of medical officers that civil practitioners have to be employed.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending November 18, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Nov. 11.....	0	18	53	4	12	47	5
" 18	0	12	46	3	3	60	0

The Thames Mud-Butter.—The latest London industry is the collection of oleaginous deposits in the mud of the Thames. It is quite profitable, the mud gatherers making three shillings and sixpence a day. Small globes made of cork and lined with hair are planted in the mud at low tide and the fatty substances in the water adhere to them. This miscellaneous grease is manufactured into fresh butter for the London market, at least so say the London papers.

Weekly Bulletin of Medical Societies.—In the course of the next fortnight we shall endeavor to commence our weekly bulletin of Medical Societies. The Secretaries of the various organizations will please send their notices at *the earliest possible moment*, with the titles of papers to be read, to the Editor, 38 East Thirty-second street, N. Y.

Private Medical Schools.—Two private Medical Schools have been started in London.

The Practice of Medicine in Texas.—A new State law of Texas provides that hereafter no one shall practise medicine within the said State without being qualified to do so by a license from a board of examiners from one or other of the judicial districts. The boards are to meet semi-annually at some central point. The fee of the board is twenty-five dollars for each applicant.

Dr. Grainger Stewart, well known in this country by his admirable work on Diseases of the Kidneys, has been appointed Professor of Medicine at the University of Edinburgh.

Sir William Fergusson has so far recovered as to be able to resume his private practice in London.

Desault.—A bust of Desault was publicly unveiled on October 15th, at Lure (Haute Saône), his native city.

Medical Women in Ireland.—Six women were recently refused admission to the Queen's College, Galway, by the Council of that Institution.

Cholera is still prevalent in Peshawur.

The Discovery of the Circulation of the Blood.—A bust of Andrea Cesalpino, as the discoverer of the circulation of the blood, was unveiled October 30th, in the library of the University of Rome. His claims were advocated by Prof. Scalzi, who delivered an address on the occasion.

Cause of Decay of the Teeth.—Dr. L. B. Palmer, of New York, has been led to conclude, from a series of experiments, that the decay of the teeth is not, as is generally supposed, due to acids, but to alkalies. With alkalies he reproduced decay of the teeth as it is seen in the mouth, but was unable to do so by acids. With the assistance of an electric current, acids simply acted on and destroyed the whole of the enamel.—*Amer. Jour. of Dental Science.*

Remedy for Dandruff.—A French physician (Apoth. Ztg.), claims to cure this troublesome affection by applying a solution of chloral hydrate, containing five per cent. of the latter, by means of a sponge, and repeating it every morning. If the hair has fallen out in consequence of the dandruff, it is claimed that the said hair will reappear in a month.

The Statue to the late Sir James Simpson, Bart., M. D.—Concerning this statue the *British Medical Journal*, Oct. 28th, says:

"The bronze statue of the late Sir James Simpson is now in the artist's hands, and stands ready to be removed to the site fixed upon for it, viz., in the East Princes Street Gardens, as soon as the pedestal on which it is to stand shall be erected. The casting produced by Messrs. Masefield, of Chelsea, turns out to be one of unusual excellence. The statue represents the subject in the sitting posture, and is eight feet in height, corresponding to a standing height of twelve feet; the pedestal is to be ten or eleven feet high. Sir James is represented in academic robes, sitting erect with the face turned towards the left shoulder, in the attitude of a man earnestly enforcing his convictions; while the right hand supports one side of a large book which rests on the knees, the left is engaged in turning over the leaves. In modelling the massive head, Mr. Brodie had the busts executed by himself from the life, and he has been very successful in reproducing both the features and the tenacious expression of the original. This part of the casting is peculiarly effective in the sharpness and precision with which it gives every touch of the graving tool; and the same may be said of the hand, in which the sculptor has vividly realized another characteristic feature."

A Pessary Imbedded in the Vagina for Thirty Years.—At the Abernethian Society of St. Bartholomew's Hospital, on Thursday, October 19th, Dr. Maberley showed an old-fashioned pessary, flat and circular, about three inches in diameter and with a hole in the centre. It was extracted from the vagina of a woman, aged forty-five. The history showed that it must have lain there for nearly thirty years unknown to herself. It was inserted by a distinguished obstetric physician, and the girl (as she then was) appears to have misunderstood what was said at the time to her mother respecting it. The pessary has, of late years, caused very unpleasant symptoms, which remained unexplained till it was detected and removed by Dr. Godson.—*Students' Journal and Hospital Gazette*, Nov. 4.

The New York Aquarium Journal. Edited by W. S. Ward. Nos. 1, 2, 3.—This is a semi-monthly illustrated journal, devoted to the interests of the new Aquarium, and is mainly made up of interesting facts and fancies concerning the peculiarities and habits of the various members of the finny tribe on exhibition at the institution. Some of the articles are selected, while others are written specially for the *Journal* by gentlemen well versed in ichthyological lore. One column in each issue is devoted to the entertainment of the young folks. The really interesting matter which the *Journal* contains, and the low subscription price (fifty cents a year), should make it a welcome addition to the family circle. In the third number it is stated that the library of the Aquarium, a large and well-furnished room, is at the service of any organized scientific body that may desire to occupy it for special or regular meetings, *free of charge*. Applications to be addressed to Mr. W. S. Ward, at the Aquarium, cor. of Broadway and Thirty-fifth Street. This is a liberal offer which some of our medical societies would do well to consider.

Original Communications.

COLD BATHS IN THE TREATMENT OF TYPHOID FEVER.

ILLUSTRATED BY TWO SEVERE AND SUCCESSFUL CASES.—REMARKS ON THE PRINCIPLES INVOLVED.

By LOUIS GIGNOUX, M.D. (Univ. Paris),
PHYSICIAN TO THE HÔTEL-DIEU, LYONS, FRANCE.

Hattie G., eighteen years old, was attacked with typhoid fever the first part of December last. Upon the eighth the disease was clearly defined; after the initiatory headache, feebleness, diarrhœa, distended abdomen, rose spots, intense fever, 41° Centigrade (105.80° F.), slight morning remission 40.8° C. (104.44° F.). At this time a bronchitis was observed with mucous rales, a few dull points at the base of the lungs, with a little temporary bronchial respiration.

About the twelfth day there occurred a large intestinal hemorrhage, which was repeated the thirteenth and the fourteenth day. I was called in upon the fifteenth day, and found her in the following condition: Dorsal decubitus, very marked typhic appearance, yellow congested conjunctiva, dull expression of countenance, intelligence obscure, still recognizing me, sub-delirium the moment the attention is not held; abdomen very much distended, covered with red spots, stools involuntary, blackish, formed of blood which had laid in the intestines; tongue parched, black, the patient refusing to take scarcely any food, or even liquids, and vomiting if she is forced to swallow any. Numerous sub-crepitant rales, disseminated over the lung, respiration very obscure in certain points, in other points a little souffle. Slight dullness at the base of both lungs, short, frequent respiration, 46 a minute. Since the hemorrhages the pulse has been very small, intermittent, 140 to 145 a minute, heart-sounds very feeble, beginning of an eschar over the coccyx. The heat is intense, the thermometer left in the rectum for five minutes registers 41.4° C. (106.52° F.). The patient is attended by two distinguished physicians, Dr. Lambron, *médecin-inspecteur des eaux de Luchon*, and Dr. Grandvilliers, both *ancien internes* of the hospitals of Paris.

In the presence of so serious a condition, and so elevated a temperature, I did not hesitate to advise the cold bath. The physicians did not immediately accept this proposition; they objected on account of the chest symptoms, which they rightly regarded as very serious, and which in my opinion was precisely the reason why the employment of the baths was urgent. The physicians proposed a blister over the whole of the back, which I did not agree to; I accepted only dry cups over the chest and the use of very cold affusions over the whole body. It was, however, agreed that if these lotions did not diminish the temperature in a marked degree, cold baths should be employed, for it was impossible to admit that life could be prolonged more than two or three days with a temperature exceeding 41° C. (105.80° F.). The cold affusions were made with great care, a quarter of an hour at a time, without producing any result, the thermometer remaining stationary between 41.2° and 41.4° C. (106.16° and 106.52 F.). After having thus lost twenty-four hours, during which time the feebleness and the difficulty of respiration continued to increase, it was decided to give the baths. I put her then in a bath at 20 C. (68 F.), where I left her for fifteen minutes. She was almost insensible to the impression of cold, not shivering at all. After the bath she was put back into bed, hardly wiped off, and a light covering thrown over her. A quarter of an hour after the bath the rectal temperature was 40 C. (104° F.). I was pleased to see the bath had produced its effect. I made her swallow three or four spoonfuls of soup, stopping when efforts at vomiting manifested themselves. Before the bath I had caused her to take a spoonful of sherry. The general condition unchanged. The bowels were kept constantly covered with cold compresses, renewed every five minutes. Three hours after the bath, rectal temperature 41.1 C. (105.98 F.). Another bath, just like the preceding one; wine before, soup after. Upon going into the bath and upon leaving it, the head was sprinkled with water at 15° C. (59° F.). I was very careful to keep her in the water up to her neck, an important precaution with all, and especially with her, on account of the thoracic complication. Upon leaving the bath, rectal temperature 40 C. (104° F.); general condition unchanged. Three hours after, temperature 41° C. (105.80 F.). Another bath; half an hour after, 40.1 C. (104.18 F.); the baths are well borne; the adynamic condition is still too profound to permit the patient to be sensible to cold; she does not complain, nor has she any chill; she appears to have a tendency to sleep, so that we never fail to give before the bath one or two spoonfuls of Madeira wine or of port, and during the bath the legs, the thighs, and the arms of the patient are kneaded with the hand. Some involuntary black stools; bladder paralyzed and distended; urine red, withdrawn by the catheter. Three hours after, temperature 40 C. only (104° F.). Another bath exactly like the preceding one. After the bath, 39.2 C. (102.56 F.). This bath has been accompanied with a little shivering, which continued after the patient was placed in bed. After the bath, there was for the first time a little cough, the bronchial sensibility being aroused. Up to this time the patient had never coughed, notwithstanding the great pulmonary engorgement. Three hours after, temperature 40 C. (104° F.). Bath; after the bath, 39° C. (102.20° F.); cough more marked, slight expectoration. The patient always takes before each bath a large spoonful of wine; after each bath three or four spoonfuls of soup; unfortunately, no more could be given.

The seventeenth day: She had taken up to that time eight baths in twenty-four hours; the temperature no longer rose above 40° C. (104° F.), remaining about two hours and a half at 39° C. (102.20° F.) between the baths, increasing at the end of that time, as could be perceived by the redness of the cheeks, the agitation, the delirium which returned; for after the bath she began to have a little tranquil sleep. The physicians, perceiving that the general condition was about as serious as before, proposed to stop the baths. They were especially impressed with the smallness of the pulse, which was very feeble, intermittent, and always 45 per minute. I assured them that in the treatment by cold baths it was unnecessary to pay much attention to the state of the pulse, which was always small, contracted, and very bad; that these intermittences were observed before the baths, and was due to a fatty degeneration of the heart produced by a long continued elevated temperature, and also by the previous intestinal hemorrhages. I also caused them to observe that auscultation did not reveal any greater disorder in the lungs, and that the respiration had diminished to 36 per minute. I was permitted to continue.

Eighteenth day: Condition about the same; before the bath, 40 C. (104° F.); after, 39.2°, 39.1°, 38.9° C.

(102.56°, 102.38°, 102.02° F.). Cough more marked; a little more expectoration; alimentation perhaps a little stronger, four or five spoonfuls each time; calm sleep between the baths. Respiration diminished to 34, and auscultation reveals to the physicians a notable amelioration; urine less red (since there is less fever), more abundant, always withdrawn by the catheter.

Nineteenth and twentieth days: Same condition, same treatment. Amelioration more marked, except by the pulse, which remains 150, very feeble, irregular; but the intelligence is less troubled, she is delirious only at night; complains of the bath and desires to be taken out, chills sooner and for a longer time. There is still a little cough and expectoration, nothing more perceived upon auscultation. Alimentation increased a little. Urine clearer and more abundant. Eschar upon the sacrum does not increase; the stools are soft, dry, no longer black; respiration has fallen to 30.

For eight days the same treatment was continued without any modification. A bath at 20° C. (68° F.) for fifteen minutes, an aspersion always before the bath and one after, two spoonfuls of wine before the bath (which makes about two ounces a day), after the bath a coffee cup of semi-liquid food, soup, coffee with milk, tea, chocolate with milk or water, arrow-root, etc.; respiration 26–28 per minute.

At this time, the twenty-eighth day, the temperature before the bath was found to be only 39.5° C., 39.3° C. (103.10° F., 102.74° F.). The bath then was given only for twelve to thirteen minutes, always at 20° C. (68° F.). It produced its usual effect—a diminution of a degree. They were continued.

The following days, three hours after the bath, temperature 38.5° C. (101.30° F.). Bath omitted and soup and wine given, waiting three hours, then the temperature rising to 39° C. (102.20° F.), the bath at 20° C. (68° F.) given for ten minutes.

Finally, she took only two or three baths a day, when the temperature showed 38.5° C. (101.30° F.), and after a few days at 30° C. (86° F.), the temperature not rising above 38.5° C. (101.30° F.). The baths were stopped, convalescence began. The appetite was insatiable, and it was necessary to restrain it. Chicken and other food was given only after ceasing to give the baths. The stools were natural, and for some days had a form; urine limpid, eschar upon the sacrum not yet cicatrized, but looking well. The pulse was still feeble, frequent, 140, irregular, and this condition continued several days, necessitating the administration of wine in larger doses. The patient remembers nothing, not even her baths, unless the last ones.

The preceding observation draws its importance from the condition of the chest, and the intestines which were the source of the profuse hemorrhages.

The following observation of E. depends for its value, upon the cerebral symptoms: it is the cerebral form of typhoid fever.

E. M. took the fever the first of July last. At first the diagnosis was a little obscure. There was little headache, followed by lumbar pains, giving rise to the opinion that they were due to a simple cold, particularly as the morning remissions of fever were very marked. The diagnosis was well established upon the tenth day, when there was constant diarrhœa, distended abdomen, feebleness, stupor, etc., the fever became more intense, and continued with mutterings at night. Nevertheless, for several days the disease did not offer any complications. It was not until the fifteenth day that the fever became so intense and continued as to cause Dr. Lambron to use at first cold lotions, and afterwards cold affusions over the whole body in an empty bath-tub. These means produced no effect whatever. About the twenty-fifth day from the first appearance of sickness, I was called and found her in the following condition: Intense heat, pulse 130; temperature 41° C. (105.80° F.), appearance typhic, serous, yellow infiltration of the conjunctiva, intelligence gone, hardly recognizing those around her, diarrhœa persistent, bowels bloated, covered with rose spots, tongue black and dry, lips and nostrils fuliginous; taking no nourishment and refusing even cold drinks. Dr. Lambron gave an unfavorable prognosis, and did not think life could be prolonged beyond twenty-four hours, on account of the severe cerebral symptoms, the serous effusion of the conjunctiva, etc. An hour after my arrival I gave her a bath at 20° C. (68° F.) for fifteen minutes. After the bath, as well as at the moment of entering it, I made prolonged affusions upon the head with water at 10° C. (50° F.) and during the whole time of the bath I continued the affusions with the water of the bath-tub. The bath gave no unpleasant impression, and was not followed by a chill, the patient appearing completely insensible. She was put back into bed, simply dried and only covered with a sheet. Compresses wrung out of ice water were constantly applied to the head, the hair having been previously cut off. Before the bath I made her swallow a little wine: after the bath a few spoonfuls of warm broth. The temperature was at 39.9° C. (103.82° F.) having diminished more than one degree as the effect of the bath. Three hours after, another bath exactly like the preceding. Temperature before the bath 40° C. (104° F.), after the bath 39.2° C. (102.56° F.); cold compresses over the head during the intervals of the baths. Intelligence remains very obscure; she can hardly call the persons around her by name. Three hours after, temperature 39.9° C. (103.82° F.); another bath; after the bath 39.2° C. (102.56° F.), the bath always producing its effect. Following the bath a chill, which continued after the patient was put to bed and covered with a linen sheet, as the external temperature was very warm. In this bath the eye did not seem to be as bad, the intelligence was clearer, and she requested to be taken out of the bath. After each of these baths there was a discharge of urine and of diarrhœal matter.

For twenty-four hours the baths and the compresses upon the head were continued without any modification, unless it was when a few baths did not diminish the temperature much, as for instance, when it was 40° C. (104° F.) before, and 39.7° C., 39.8° C. (103.46° F., 103.82° F.) after; then the baths were given at 19° C. (66.1° F.) instead of 20° C. (68° F.), always fifteen minutes at a time.

The second day of the treatment, notwithstanding the continuation of these baths and of the cold compresses changed every five minutes at least, the cerebral symptoms continued to increase, every indication of intelligence completely disappeared, she could not be aroused so as to reply to any question, not even in the bath, but continued to mumble some incomprehensible words, the eyes closed, and the hands constantly occupied in drawing up her covering or seizing some imaginary object.

An inexperienced physician would have stopped the baths, observing the progressive aggravation of the symptoms. They were, however, regularly continued, with wine before and a few spoonfuls of soup after, which we were obliged to force her to swallow.

Dr. Lambron did not alter his opinion as to a fatal termination of the disease; still we had some reason to hope, for the bath held the temperature two hours out of three, that is, sixteen hours out of the twenty-four, at a relatively moderate degree. The pulse and

the respiration were good, the bowels slightly tympanitic. She took some nourishment. We then had some hopes.

The third day the carphologia and the muttering was replaced by a complete coma. During the next twenty-four hours the patient gave no sign of intelligence; the coma was absolute. The bath, the ice water poured upon the head did not for an instant arouse her from the deep coma; but the pulse and respiration were good, and she always passed urine after the bath. A bad symptom, however, was that she no longer took any food nor drink, the teeth were clenched, and if the mouth was forced open, liquids would remain unswallowed. This condition would have been very serious if it had continued, and would have necessitated the employment of the œsophageal tube for introducing food into the stomach.

Treatment continued with the same severity, and after forty-eight hours of anxiety, the patient, having taken twenty-four baths in three days, opened her eyes in the bath and recognized all about her. She seemed astonished to see me, and asked if she had taken the baths for any time, etc. From this day the intelligence was generally clear, there being only occasional moments of delirium, particularly at night, two hours and a half after the bath, when the fever returned. From this time also the quantity of wine and soup was increased. The baths easily producing a diminution in the temperature of a degree and a half, they were given again at 20° C. After even a week of treatment, the fever not reaching a temperature beyond 39.5° C. (103.10° F.), baths at 22° C. and at 21° C. (71.4° F. 69.4° F.) were tried, which produced the desired diminution. This treatment was continued another week, at the end of which time the temperature not reaching beyond 38.5° (101.30° F.), some of the baths were omitted, and their place supplied by enemata of water at 10° C. (50° F.), which often produced a little chill and always a slight diminution of the fever. Finally, three days later, the temperature being no higher than 38.5° C. (101.30° F.), the baths were relinquished and the cold enemata continued three or four times a day. Chicken, calf's brains, and other food was given, and convalescence began, which was not of long duration, taking into consideration the length and severity of the disease.

The foregoing are extremely serious cases of typhoid fever snatched from certain death by the method of Brand, although both were placed under treatment a long time after the commencement of the disease, one the fifteenth and the other the twenty-fifth day.

I could cite a great number of cases quite as severe, which I have observed and cured by this method. It is very certain that death would have occurred soon, for when the fever has reached such a degree, we cannot hope to save all. Instead of throwing the responsibility upon the method of treatment, we should rather fasten it upon the physician for commencing the treatment so tardily. When the treatment is entered upon at the beginning of the disease, or at least as soon as the diagnosis is established, not only are no patients lost, but all complications are avoided. I have had more than a hundred cases and no bad results. Some very conscientious observers have, however, had cases followed by death, even when the treatment was regularly pursued and commenced early. This is very likely, although I have myself never seen any. At any rate, these cases are very rare, and I guarantee that a fever, even the severest, treated from the moment the diagnosis is confirmed, will recover ninety-nine times in a hundred, and that even in those cases in which the complications have been permitted to arise, as in the two cases here given, they will almost always recover; only, the treatment should be pursued more vigorously and with greater exactitude and the patient watched more closely.

There is one point I cannot refrain from speaking of. In the two cases given, it is observed that the disease increased in severity the first two, three, or four days of the treatment by the cold baths. It is always so when the treatment is commenced late. It is well to know this, for otherwise the physician who is not thoroughly informed as to this method would become discouraged. This has often occurred at Lyons, and it would have been the case in these two instances, if we had not persisted in the method.

I repeat, in cases treated from the inception of the disease, complications do not arise. In my service at the *Hôtel-Dieu* of Lyons, I have had thirty-seven cases, thirty-seven recoveries; in private practice I have seen still a greater number, and no deaths. Among this number I have had some severe cases, treated late in the course of the disease; but the treatment by Brand's method has no contra-indication. I have had six cases of intestinal hemorrhage, eight cases of general bronchitis, two cases of pneumonia, three cases of diphtheritic angina; I have treated two pregnant women, the gestation following its usual course; two nursing women; two cases with a deep eschar. In fact, no contra-indication. The sooner the treatment is begun, the fewer the complications.

From the moment the diagnosis is made we begin the cold bath at 20° C. (68° F.), fifteen minutes at a time. The bath should diminish the temperature about a degree (2° F). This is the test: under these conditions, the bath almost always succeeds. If it diminishes it only five- or six-tenths, or for a still greater reason, not at all, as sometimes occurs in stout, fat persons, the next bath should be given at 19° C. (66.1° F.) or even at 18°; below that there is seldom any occasion of going. Again, if the bath diminishes the temperature from two to three degrees, as occurs in children of two, four, or eight years, or in very thin persons, the baths are then given for twelve, ten, or even eight minutes. It is requisite that the thermometer, placed in the rectum half an hour after the bath, and left there four or five minutes, should show a diminution of a degree C. This is repeated every three hours, while fever continues, as long as the temperature exceeds 38.5° C. (101.3° F.)

The fever continues as long in this method of treatment as by any other, only it is not complicated. The patient takes a little wine before each bath, and after each bath a little soup or other semi-liquid food. Between the bath, only ice-water or pieces of ice, especially if the tongue is dry, so that he is always fasting when he takes the bath. Before and after the bath cold water is poured upon the head, and in the interval cold compresses are kept constantly applied upon the affected organ or organs if there are any; upon the head, if there is headache or delirium, or epistaxis, etc.; upon the bowels if there is tympanitis, or diarrhœa, or hemorrhage (in the latter case bladders of ice are preferable); upon the chest if there is pneumonia. But if the treatment is commenced early, these precautions are most frequently unnecessary, the baths are all-sufficient, medicine useless; the diarrhœa ceases almost immediately, the bowels become supple, urine clear, stools natural and formed, and the appetite becomes keen. It is proper to resist this so long as the fever lasts and the baths are required, keeping to soups more or less strong, excluding meats until the baths are relinquished, and even then giving meat with great caution.

Towards the second or third week, when the fever is less intense, if the thermometer indicates a less degree, about 39° C. (102.20° F.), for example, the baths may be given for a shorter time, or less cold, and so continued if they produce the desired effect, that is to say, if they diminish the temperature a degree C. Finally, when the temperature is under 38.5° C. (101.30° F.) towards the end of the disease, omit the baths, giving the soup the same. Three hours after take the temperature, and if it exceeds 38.5° C. (101.30° F.) give the bath again; if not, give the soup and wait three hours.

The bath should always be given away from currents of air, and patients should be immersed up to the neck. (Given with these precautions, I have never known them to take cold.) Returned to bed, they should be wiped off gently, and covered lightly so as to avoid a reaction. If they are warmed by extra covering or by rubbing, the treatment would fail in its principal object, that of refreshing the patient during the greater portion of the disease.

Generally, after two hours and a half the cheeks become red, the temperature elevated, and the same condition exists as before the bath. Then another bath is prepared; we assure ourselves that it is at a proper temperature, 20° C. (68° F.); then we take the temperature of the patient, which is always increased, for the color in the cheeks, the restlessness, etc., never deceive.

After the bath patients often complain of cold extremities. There is no harm in wrapping the hands and feet in flannel, or even putting a bottle of hot water to the feet. Care should be taken, however, not to heat the rest of the body.

Patients also complain very much of the chill which they have towards the end of the bath, sometimes from the beginning, and which frequently lasts for an hour after being replaced in bed. It is painful to witness, but it is necessary to endure it, for it is a good sign, and if the bath does not diminish the temperature more than a degree, or a degree and a half, it should not be changed. It is absolutely necessary that the bath should produce the required effect. This chill is, however, the only disagreeable thing which occurs to the patient, while as a compensation he takes food during the whole of his sickness, often sleeps two hours and a half between baths, has no eschars, and almost as soon as the baths are omitted, whether upon the twentieth, thirtieth, or fortieth day, whether he has taken fifty baths or one hundred and fifty, or two hundred, as is sometimes necessary, the patient is capable of getting up and walking from one room to another, and ordinarily, if the weather is good, to go out within five or six days.

If fever is brought on by taking solid food, recourse should be had to the former semi-liquid diet, recommencing the use of meat after a few days. If there is constipation, enemata of cold water will almost always be sufficient to relieve it; if not, a little vinegar may be added.

This treatment is easy to pursue in all classes of society and is very economical. It is important to have a good thermometer and a good nurse. A moderate amount of intelligence is all that is necessary to make a good nurse, and as soon as the physician is sure of his nurse, he can *almost* leave the treatment to him.

THE MEDICAL REGISTER AND DIRECTORY OF THE UNITED STATES.—A new edition of this work is announced by its editor to appear during the present month.

CASE OF OTITIS EXTERNA DIFFUSA ET SUPPURATIVA, CAUSED BY INSPISSATED CERUMEN.

ALSO THE USE OF POLITZER'S AIR-BAG IN REMOVING A FOREIGN BODY FROM THE NASAL CAVITY.

BY J. OSCROFT TANSLEY, M.D.,

NEW YORK.

THE following case has nothing of especial interest above the ordinary cases of otitis externa, and of otitis media suppurativa, other than its causation, this being especially rare, and but little referred to in the records of ear cases. In fact I can, at the present moment, recall but one reported case, and that was by Dr. David Webster, in the MEDICAL RECORD, Vol. V., page 536, and reprinted in Dr. Roosa's excellent treatise upon the ear.

I desire to call especial attention to the condition of things which was the cause of trouble in this case, as it is one easily diagnosed by any person who is the possessor of an ear mirror and speculum, and is experienced in using the same. Had the attending physician previously skilled himself in examinations, so that he might have examined understandingly, and treated the case with syringe and warm water instead of the purgative pills which he gave to "relieve the stuffy feeling in the head," or the instillation of "laudanum and sweet oil to stop the pain, and improve the hearing," he would have prevented much unnecessary annoyance and suffering on the part of his patient.

Those who think it an easy matter to always diagnose correctly, will ascertain their error should they treat cases for a few months. I have seen a roomful of doctors, many of whom had been treating ears for several years, fail in making a diagnosis in the case of a man who had a piece of *red wool* in the external canal, and of which he could give no history. It was diagnosed as being a hæmatoma, blood in middle ear, etc., and there was considerable merriment when this "terrible affection" was extracted with a pair of angular forceps, to the entire relief of the patient.

The history of the case upon which the foregoing remarks are founded is as follows:

Delia L——, aged eighteen years, presented herself Monday, January 10, 1876, for treatment, complaining of severe pain, swelling, and loss of hearing in right ear.

History.—December 26, 1875,—that being fifteen days before,—had a sudden loss of hearing accompanied by tinnitus aurium in right ear. Ten days after she had severe pain, and the swelling began to show itself. Pain was very severe, and has continued unceasingly since. Never had any trouble with ears previously, excepting slight attacks of tinnitus in right ear and also in left, but to so slight a degree as to cause no especial discomfort.

Examination.—Right external auditory canal and ear considerably swollen, meatus nearly closed, and containing puriform matter; hearing distance $\frac{10}{48}$. Left ear, of which no complaint was made, was found to contain considerable amount of inspissated cerumen; hearing distance nearly, if not quite, normal. Eustachian tubes both easily pervious to the Valsalvian and Politzer's method of inflation.

Treatment.—Right ear was carefully syringed out with warm water, in which Sodii carbonas was dissolved, and considerable cerumen and some pus was washed out; by carefully using a small speculum a

view of the membrana tympani was obtained, and it was found to be covered with small pieces of exfoliated epidermis and cerumen, but no perforation was discoverable by any means of observation. After the syringing, although complete cleanliness was not secured because of the smallness and tenderness of the external canal, the hearing distance was increased to $\frac{10}{18}$.

From the left ear, although, as I said above, no complaint was made, a large piece of inspissated cerumen was removed, and hearing distance became more than normal.

Diagnosis of this case, which was seen by Dr. Webster, was inspissated cerumen becoming impacted December 26th, and causing otitis externa diffusa et suppurativa, by its presence as a foreign body January 5th. Advised to use aural douche with warm water several times a day, especially when there is pain, and be careful as to exposure.

Wednesday, January 12th.—The pain continued most of the night after removal of the wax, and then, as she said, "it broke," and the pain was relieved.

There is now a small perforation of membrana tympani; thus it is evident that the inflammation has extended into middle ear, and now there is otitis externa et media suppurativa acuta. Advised to still continue use of douche.

Friday, January 14th.—Pain not as great, only several times a day; there is no perforation to be found to-day. Inflates by Valsalvian method easily. A leech was applied, and patient told to continue use of douche as before.

Monday, January 17th.—Had considerable pain the day after last visit, but since has had no annoyance. Meatus considerably less swollen than when last seen, but contains small amount of pus. Hearing distance $\frac{10}{18}$.

Was syringed, and considerable exfoliated epidermis, which could not be removed without too much irritation; was found to obscure the view of membrana tympani. Tubes pervious to Valsalvian and Politzer's method. No perforation of membrana.

Monday, January 24th.—Ear very much better; swelling almost entirely disappeared; has no pain and considers herself cured, but I cannot get a satisfactory view of membrana tympani because of quantity of partially exfoliated epidermis obscuring the view, which I cannot remove with syringe, and do not care to try other means. Inflated by Politzer's method and instructed to still use douche.

Monday, January 31st.—External meatus contained a small amount of pus; says ear has been well until yesterday, when it pained considerably, but ceased last night. Was washed out and found to be generally much improved upon the condition of last week; meatus much larger and less tender, but membrane not yet of normal appearance. Advised to continue as heretofore.

Monday, February 7th.—Patient deems herself well, but the membrana is not yet in normal condition, and shows still lingering traces of inflammation.

Patient has not appeared since.

As a close, it is hardly necessary for me to say that, had this case not received the necessary attention, the affection would have passed on into otitis media suppurativa chronica, with the possibility of any of its serious consequences manifesting themselves at some future time.

FOREIGN BODY IN NASAL CAVITY.

I desire to call the attention of the profession to the use of Politzer's air-bag in removing foreign bodies from the nasal cavities, and will do so by citing the first case in which I used it.

A boy of about five or six years of age came to the clinic for treatment of otitis media suppurativa chronica, and after I had passed through the usual routine in such cases, I remarked that his eyes were red, and there was considerable lachrymation. I asked the cause, and ascertained that the day before the boy had in play passed a piece of *raw onion* up his nostril, and that his mother had tried various methods, among which was the use of a hair-pin, to remove it, but had been unsuccessful.

I could not examine with the forehead-mirror because of the child being so unmanageable, and the idea occurred to me that if I could produce a forcible current of air or water through the nares I could probably dislodge the foreign substance, and the posterior nares syringe and Politzer's bag suggested themselves as means to accomplish my object.

I used the posterior nares syringe, first to prepare the way by softening the secretions, and then Politzer's bag as usual, only taking the precaution to put the bulb-nozzle into the nasal opening which was known not to contain the substance to be dislodged, and also not to close the opposite nostril as is usual when the object is to inflate the middle ear.

I employed considerable force, for I feared I should not have the opportunity to make a second trial; and at the first attempt there was blown forcibly from the unclosed nostril quite a large piece of raw onion. The little fellow was pleased to see his enemy dislodged; and how he had been able to sleep the previous night with this extreme irritant to the Schneiderian membrane in his nose is beyond my comprehension.

This plan seems to be peculiarly applicable where the patients are young children, in which cases the use of forceps, spiral extractors, etc., without etherization, are usually next to impossible.

A CASE OF DISLOCATION OF THE HEAD OF THE RADIUS BACKWARDS.

REPORTED BY G. J. MACK, M.D.,

OF WATERLOO, IOWA.

PATIENT, a boy seven years of age, on the fourth of November, 1876, fell from a ladder, a distance of four or five feet, striking upon the floor. In what position he struck I do not know, as there were no bruises upon any part of the body to indicate, and the boy himself did not know. I saw the patient, with Dr. A. Middleditch, of this place, about three hours after the accident. Found him sitting in a chair, with the left elbow held away from the side slightly. Hand and forearm resting on his left thigh, and pronated. Any attempt to rotate forearm caused severe pain. The boy being quite spare, and no tumefaction having occurred at this time, the radius could be distinctly traced to a point posterior to the external condyle of the humerus. The form of the head of the radius could easily be felt, with the depression or cavity upon its upper surface. The dislocation was readily reduced by Dr. Middleditch, by making traction upon the forearm, flexed to a little more than a right angle; while the humerus was firmly held by being brought against his knee, and grasped above by me to fix it more firmly. After continuing the traction a few seconds, the head of the bone was pushed into its place by pressure of the thumb. Flexion, extension, and rotation were now perfect, and [produced

but little pain, with no apparent tendency to a re-dislocation. The form of the joint was also perfect. Right-angled pasteboard splints were then applied to the internal and external surfaces of the arm, and bandaged rather tightly. Since the accident, to the present time, two weeks, there has been no great swelling or soreness about the joint. Flexion, extension, and rotation are now perfect, only producing slight pain.

The original splints have been continued to this moment.

It may be proper to add that the dislocation was unaccompanied with any fracture or other complication.

Clinical Reports.

REDUCTION OF DISLOCATION OF FEMUR UPON THE DORSUM ILII; WITH REMARKS.

By DR. FRANK H. HAMILTON, M.D.,

AT BELLEVUE HOSPITAL CLINIC, NOV. 8TH, 1876.

M. J., æt. 33, a strong, muscular man, fell and dislocated his right hip, November 7th, 1876. He could give no account of the manner in which the accident had occurred, except that it happened upon the sidewalk, and when he was intoxicated.

Dr. Hamilton brought the patient before the class, about twenty-four hours after the accident, under the influence of ether, and stated that he had found him in the hospital, lying upon his left side, the thigh flexed to about 75°, and with the usual immobility. When brought before the class anæsthetized, the flexion of the thigh was found to be increased nearly to a right angle, but it was easily brought down to the same position as before the anæsthesia.

Attention was then called to the four principal forms of hip-joint dislocation, and especially to the signs which indicate a dislocation upon the dorsum. "The manner in which the accident occurs often furnishes presumptive, and sometimes conclusive evidence as to the nature of the injury, especially in determining whether it is a fracture or a dislocation. If this man had fallen square upon the trochanter major, it could not be a dislocation. The head of the femur lies so deep in its socket, that it is impossible that it should be dislocated by a direct blow. In order that this bone may be dislocated, it is necessary that the force be applied to the opposite extremity, and that it be thrown violently in such a direction as that it shall be converted into a lever. This law applies to the dislocation of most bones, and especially of the femur. Dislocation of the head of the humerus, however, constitutes a notable exception; since, in the case of this bone, the dislocation is quite as often caused by a direct blow upon the shoulder as by an indirect force acting upon its lower end. This is easily understood, when we notice the shallowness of the glenoid cavity, and the prominent and exposed position of the head of the humerus.

"We ascertain that this is a dislocation, then, without any knowledge of the precise manner of the accident; but having determined the fact of the dislocation, we are permitted to assume that it was not from a direct blow. The right thigh—which is the thigh here dislocated—must have been carried forcibly across the left.

"That it is not a fracture, we know from the position which the limb takes, and from the fact that it cannot be moved from this position, except in one direction, namely, of flexion. If it were a fracture, the limb would rest parallel with the other, or it could be easily placed in that position. In the case of this patient, the rigidity or fixedness of the limb remains even now, when he is completely under the influence of ether. As you see, the thigh can neither be abducted, nor rotated outwards, in any degree. We cannot appreciably increase the adduction; and we can only extend the limb a few degrees, or to about the same point at which we found it at the first.

"With regard to the amount of shortening in these cases, Sir Astley declared that the limb was sometimes shortened, in the dorsal dislocation, three inches; but Malgaigne declared that he had never found it shortened more than half an inch, and sometimes not at all, and he believed that the statements made by Sir Astley, and others, were due to errors in measurement. The most frequent source of error is, that one limb is measured flexed, and the other straight; and this alone may account for all the difference found in the opinions and statements of these two distinguished surgeons. Nevertheless, I am persuaded that, inasmuch as the shortening is due, in most cases, to a displacement backwards as well as upwards, the shortening does occasionally reach two inches or more."

Drs. Wood, Sayre, and Sabine, visiting surgeons to the hospital, were then requested to examine the limb. They all declared it a backward dislocation. Two of the gentlemen named thought it ischiatic; and one, with Dr. Hamilton, thought it was upon the dorsum ilii. Opinions were therefore equally divided. Dr. Hamilton stated, that the fact that the limb was more flexed than is usual when the head is upon the dorsum, might be explained by the position which the patient occupied; if he were standing, probably the limb would become much more extended. He further remarked, that a difference of opinion on this point was frequently found to exist among surgeons of equal experience, after a careful examination; thus proving how difficult it was, sometimes, to say whether the head was upon the upper margin of the ischiatic notch, or higher up, and fairly upon the dorsum; but he believed this to be upon the dorsum. Fortunately, however, it was not of much practical importance to decide this question, since in either case the mechanism of the reduction, by manipulation, was about the same. The chief point of difference being, that when the head was in the ischiatic notch, there was more danger of carrying it around the lower margin of the acetabulum into the foramen thyroideum; and it was necessary to be more careful, in flexing the thigh, not to throw the head too low down.

"I will remark," said Dr. Hamilton, "that this patient has taken ether. In nearly all my surgical operations I prefer ether to chloroform, as being equally efficient and more safe; but in the reduction of dislocations we need complete muscular paralysis, and this is much more quickly and certainly attained by chloroform than by ether, and I am in the habit of using chloroform in the reduction of dislocations; but I am informed that the Commissioners have lately forbidden its use in this hospital."

Dr. Hamilton then stated that he would proceed to attempt the reduction: *first*, by gentle and very guarded manipulation—a method which has often succeeded, and which causes little or no additional lesion to the capsule. If this failed, then, *second*, he would resort

to violent or more forcible circumduction, by which additional injury would probably be inflicted upon the capsule. If this failed also, he would then, *third*, try extension, as recommended and practised by Sir Astley Cooper.

Reduction.—The patient resting pretty fairly upon his back, Dr. Hamilton, standing upon the right side of the patient, *first*, took hold of the dislocated limb (which was large and powerful), by placing the palm of his left hand under the knee, and grasping the top of the ankle with the right hand. The leg was brought to a right angle with the thigh, and the thigh flexed to a right angle with the body the whole limb being still in a position of adduction and inward rotation. When the thigh reached the position of a right angle with the body, there was evident resistance, indicating that it could be carried no further in this direction without the application of considerable force. *Second*, the thigh was abducted moderately, or as far as it could be carried without force. Attention was called to the fact that even this amount of abduction was impossible when the thigh was in the position which it occupied before the manipulation was commenced; but the abduction did not exceed eight or ten degrees, and was not sufficient to elevate the thigh to a perpendicular line—indeed it was considerably short of this position. *Third*, the whole limb was rotated outwards; and here was the first point of delay in the process of manipulation. During a few seconds no further progress was made toward reduction; but the position was steadily maintained by continued forcible rotation outwards. Dr. Hamilton remarked that he felt no yielding of the bone; but this observation had scarcely been made, when the head suddenly slipped into its socket, and the limb fell, with a peculiar oscillating motion, upon the table, parallel with the sound limb.

To the applause which immediately followed the reduction, Dr. Hamilton responded as follows:

"Gentlemen, I accept the applause as a tribute to Science, but not to myself personally as having displayed any especial skill in the reduction. Any one of the distinguished gentlemen present would have been equally successful; and I have no doubt that, now that you have seen the method, you will succeed also, if ever you have occasion to try it. Let no one say that surgery makes no progress. It is true that this method is probably very old. Hippocrates described very briefly how we might sometimes reduce a dislocation of the thigh, by bending the limb at the joint and making rotation; and many other surgeons, from time to time, have, more, or less, perfectly described this mode of reduction; yet it was so little known to surgeons generally, that even Sir Astley never alluded to it in his Treatise on Dislocations and Fractures near the Joints, nor in any of his other writings. Professor Nathan Smith, of New Haven, practised this method; and in the volume published by his son, Professor N. R. Smith, of Baltimore, the method is described with great fidelity, and is illustrated by drawings. Notwithstanding all this, to the late Dr. Read, of Rochester, N. Y., the profession and the world are indebted, mainly, for our present knowledge upon this subject; since he again drew our attention to it, and succeeded in demonstrating, to the complete satisfaction of all, by a number of cases, its great superiority over every other method. When, however, he was reminded that Dr. Nathan Smith had described and practised the same method, that many others had done the same, and that he could not, therefore, claim, strictly speaking, the original discovery, he refused to concede this point; claiming that Nathan Smith had directed the limb to be carried up abducted, which, he affirmed correctly, was impossible; but he evidently misunderstood Dr. Smith, who had only said that the thigh must be *slightly* abducted, by pressing the knee outwards while it was being flexed; and this advice was given in order that the head of the bone might be kept near the posterior lip of the acetabulum. This may be, and we think it is, unnecessary, but it does not affect in any way the principle of the reduction.

"I wish to call your attention again to the fact that, in effecting reduction, the thigh was only moved in those directions in which it could be easily moved. It could not, at first, be abducted or adducted, or extended. In all these directions it was nearly or quite immovable. It could, however, be flexed easily to a right angle with the body; and this was the first thing done. Dr. Read declared that the thigh must be flexed until the knee touched the belly; but I have never found this degree of flexion necessary, except in old dislocations. Nor is it proper, in recent cases, to make this extreme flexion, unless moderate (right-angled) flexion has failed, since it increases the laceration of the capsule, renders liable a displacement of the head of the bone into the foramen thyroideum, and endangers a fracture of the neck of the femur. When the thigh-bone had arrived at a right angle with the body, a slight abduction became practicable; and now the head of the femur, situated behind the acetabulum, was ascending the inclined plane towards its posterior lip or margin. Steady and forcible rotation outwards, of the knee and thigh, finally carried the head into the socket. This might have been facilitated by lifting the knee, or by a slight rocking motion, as first described by Nathan Smith; but neither of these aids were required in this case."

Before the patient was removed, a small pillow was placed between the knees and the legs loosely tied together, to prevent a re-luxation.

Immediately following this case, an old lady was presented, whose shoulder had been dislocated a few days before, and had been promptly reduced by Dr. Hamilton's senior house surgeon, Dr. G. B. Hope; and a second case of old dislocation of the shoulder in a man was also introduced. Both of these shoulder dislocations were caused by direct blows, and served to illustrate the remark previously made that, in regard to the causation, the same law does not apply to the shoulder as to the hip.

Note.—The man whose thigh was reduced walked without limping, on the fourth day after the reduction, and ascended the five or six flights of stairs to the amphitheatre on the seventh day—walking in the presence of the class and declaring that he felt no soreness or pain in the thigh. This was done without authority from any one, and was doubtless injudicious; but it served to illustrate how little injury reduction, by manipulation, sometimes causes to the parts in and about the joint.

Progress of Medical Science.

Ligation of both Femoral Arteries. The following interesting case is reported by Dr. Erskine Mason: John McGuire, aged 23, a milk-cart driver, was admitted to St. Luke's Hospital, September 2, 1870, with popliteal aneurism of the right leg. The patient had had pain in the limb for two or three months, but first discovered the pulsating tumor about

ten days before entering the hospital. On September 7th, an incision four inches in length was made at the apex of Scarpa's triangle, and the sheath of the femoral vessel exposed. A corps of assistants was then organized, and digital compression was applied to the artery and kept up uninterruptedly until the next day, when the tumor was firmer, and the pulsation and bruit had ceased. The compression was now interrupted for five minutes every half-hour, but as the pulsation and bruit reappeared at midnight, continual compression was resumed and kept up till noon on September 9th. The compression was kept up at intervals until September 14th, when it was discontinued, the pulsation and bruit having almost disappeared. The tumor was subsequently treated by a compress and sharp flexion of the leg. On October 8th, the patient was discharged at his own request, but was directed to keep up the flexion at home. The pulsation had disappeared some time previously, but a faint bruit was still audible. On October 17th the patient was readmitted to the hospital, the tumor having increased in size and pulsation returned. On the 18th, the femoral artery was exposed in the upper part of Scarpa's triangle, and digital compression applied. The patient, however, did not bear the compression well, and on the next day the artery was ligated. He was subsequently discharged cured. The patient had been under the care of Dr. Gurdon Buck.

On June 12, 1872, the patient was admitted to Roosevelt Hospital, suffering from an aneurism of the left femoral artery in the lower third, just before the artery enters Hunter's canal. This aneurism had made its appearance about three months previously. The circumference of the tumor was twenty and a half inches. Bruit, thrill, and pulsation were well marked. A hard, apparently solid mass, the remains of the first aneurism, was found in the right popliteal space. As the patient decidedly objected to any attempt at compression being made, Dr. Mason ligated the left femoral artery in the middle third, on June 22d. The ligature came away on July 10th. On August 6th, the size of the tumor was eighteen and one-quarter inches, and the patient was discharged cured.—*Archives of Clinical Surgery*, September.

The Alterations in the Mucous Membrane of the Stomach consecutive to Cerebral Lesions.—According to Brown-Séquard, softening and ulceration of the gastric mucous membrane occur after injuries of the corpora striata, of the crura cerebri, and the spinal cord; hemorrhages, on the other hand, follow injury of the pons Varolii at the point of insertion of the middle peduncle of the cerebellum. Hemorrhages do not result from paralysis of the vasomotor nerves, but on the contrary they are preceded by contraction of the arteries and veins, and consequent distention and rupture of the capillaries.—*Centralblatt für Med. Wissenchaften*, September 16th.

Solution of India-Rubber in local Treatment of Psoriasis.—Mr. Wyndham Cottle has found this material useful in chronic cases of psoriasis, where there is an excessive formation of dry scales, especially in the neighborhood of the joints, where the scales form crusts, are hard, and render the movement of the part painful. The crusts and scales being removed and the absence of grease insured by wiping the parts with ether, and the skin dried, a solution of the india-rubber is applied with a brush and the application renewed as often as is needful to maintain a continuous covering over the affected skin. He recommends a solution composed of india-rubber half an ounce, and chloroform eleven and a half ounces. He has met with more rapid recovery in these cases by this application than by the ordinary local measures, from the fact that these coverings prevent evaporation and hinder the loss of the natural perspiration of the part. He thinks the same treatment is applicable to some conditions of chronic eczema.—*The Lancet*, September 30, 1876.

Anæsthesia of the Larynx before Operations.—The laryngoscopist will sometimes meet with patients whose sensitiveness is so great that it cannot be overcome even by the greatest skill and patience, and in other cases he may be so pressed for time that he will be unable to wait for the production of tolerance in the usual way. For these cases the method of producing laryngeal anæsthesia invented by Türck, and perfected by his pupils, especially by Schroetter, is peculiarly adapted.

When, for instance, the surgeon desires to operate on the following morning, he must begin at seven o'clock in the evening to touch the laryngeal mucous membrane twelve times in succession with a brush dipped in pure chloroform. This will excite an intense congestion of the membrane, and thus place it in the most favorable condition for absorption. At eight o'clock, one hour later, a brush dipped in a saturated solution of acetate of morphia must be plunged twelve times in succession into the larynx. The patient should avoid swallowing during this time, and as a sort of antidote should rinse out the mouth and throat after each application with a gargle composed of two parts tannin, three parts alcohol, and forty parts water. Towards midnight the patient should be visited, so as to be certain that there is no morphine poisoning. At seven o'clock in the morning the larynx will usually be found to be insensible, and the operation can be performed. If the insensibility be incomplete the local applications should be repeated twelve times, and so on every hour until the desired end is attained. If opium poisoning should occur, it can be easily overcome by the usual methods, but it can almost always be prevented if a proper surveillance of the patient be maintained.—*Lyons Médical*, October, 29, 1876.

Antidote for Gelsemium Poisoning.—Dr. George S. Courtright, of Ohio, was called to see Dr. Stephen Bennett, a brother practitioner, whom he found in the following condition: The head falling forward, the chin resting on the breast, respiration slow, pulse 100, face congested, and lips of a livid color. He could move the tongue slightly, but was unable to articulate freely; the pupils were dilated and insensible to light, and there was paralysis of the lower jaw. From the symptoms the doctor decided that it was either gelsemium or belladonna poisoning. Emetics were given without success. Morphia in solution (one-half a grain), was then injected into the arm, and repeated in three minutes. Three minutes later there was a slight improvement in the breathing. Four minutes afterwards an equal amount was again injected, and two minutes after he raised his arm slightly; the pupils were now a little contracted. In another four minutes an equal amount was injected and one-half a grain given internally. During all this time the head had to be held up to allow air to enter the lungs. In six minutes another injection was given, from which time no further medication was employed, and in two hours the patient was able to talk, and prove pretty conclusively he had taken gelsemium by mistake.—*Cincinnati Lancet and Observer*, November, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, December 2, 1876.

CONTAMINATED AIR IN OUR DWELLINGS.

THE liability to contamination of the air in our dwellings seems to increase in proportion to the number of so-called conveniences of construction and arrangement which advanced civilization has made necessary. For instance, the attempts to perfect a system of sewerage in our large cities bring in their train dangers which in times past were never thought of. The modern contrivances of water-closets, sink-drains and the like, instead of causing the effectual and rapid disposal of house sewage, invites the escape of sewer-gas itself into every department of our dwellings. How to prevent the latter has become one of the most important questions of the hour. There is no doubt that a great deal can be done by intelligent householders to this end, by the construction of proper traps and by the establishment of proper sewer connections. Cases in which this is done are, however, so much in the minority, that their example has no appreciable influence upon the interests of the community at large. The difficulty is to comprehend what is really meant by the proper construction of traps and the maintenance of their proper condition. Too many believe that when the water-closet and main sink-pipes are protected, nothing else is required. Far from this being the case, we have found that a greater danger and more direct avenue for sewer-gas exists in the arrangement of the wash-bowls. The great majority of these are without any protection whatever, and there is such a constant liability for the escape of noxious vapors into the bed-chambers themselves, that it is a wonder how so many can escape the effects. The directness of communication of these pipes with the sewer was manifested in a very appreciable manner in many of the houses during the recent scarcity of water, when the traps which did exist were allowed to become dry. It is, however, absurd to suppose that a mere trap for the escape-pipe of a wash-bowl is a protection against danger when the overflow pipes still maintain a direct communication. Prudent physicians, knowing the great liability to the omission of the trap precaution in these outlets, are accustomed to cover them with wet towels, or by some other method which may be equally effective.

The necessity for frequent change of water in even perfect traps is forced upon us by the recent observations made by an eminent London sanitarian who has shown that the poisonous gases are prone after a time to saturate the water in such traps, and afterwards to escape above them.

Allowing, however, that every known precaution is taken in regard to traps and other appliances, there is no absolute security against sewer-gas when there is a sufficient pressure from below. The ventilating sewer-pipe would appear to offer, theoretically at least, the best chance for overcoming the latter. To a certain extent it accomplishes such a purpose, that is to say, when the pressure from below is extreme. In the great majority of cases, however, the ventilating tube contains a column of stagnant air, and for purposes of ventilation amounts to nothing. We certainly could not expect it to be otherwise so long as there are no provisions made for creating and maintaining an upward current through the tube. Even if the contrary were the rule, and these pipes were of real service as ventilators, there is such an objection against their manner of introduction by the Health Board on the part of property-holders, that this so-called system of ventilation can never become popular. No one doubts that the main sewers should be relieved as much as possible; but this is so obviously the business of the authorities, that the citizen as a private individual has really nothing to do with it. It is well known that the general sewerage of the city is not what it might be. The sewers built by sections have different grades, and favor stagnation of their contents, especially during the times when the water supply is not abundant. This, however, is no reason why the citizen should be compelled at his own expense to ventilate the sewer through his house. Aside from their being demonstrably ineffective, these measures of the Health Board are positively unfair, and have a tendency to excite a prejudice against sanitary reform among a class whose co-operation is of the greatest importance. But this is merely a remark in passing, to urge a more feasible plan of ventilation of the main sewers.

Not long since, a practical engineer suggested the construction of tall ventilating shafts in different parts of the city, by means of which the noxious gases could be allowed to escape directly from the street sewers far above the tops of the tallest houses. Such shafts properly constructed would doubtless answer every purpose. On general principles, at least, the system would have many strong recommendations in its favor, not the least of which would be the repeal of the present obnoxious, not to say tyrannical regulation of the Health Board. Aside from these objec-

tions, the present method of ventilating the sewers is calculated to give an idea of security to the ignorant householders, which in the present state of sanitary science is altogether unwarrantable. The principles involved in the protection of houses from contaminated air apply with still more force to those in rural districts, where the trap system is in its infancy and where the rudest contrivances for drainage are the rule.

While upon the general subject of contaminated air in our houses, we must not lose sight of the bad influence of the modern hot-air furnace. Convenience of construction and management have compelled us to place this apparatus in the cellar from which all the so-called fresh air is supplied for heating purposes. How much of really pure air can be obtained by these means is a question not difficult to answer, and yet modern civilization congratulates itself on having solved the problem of properly heating our dwellings. We are not aware that the hot-air furnace as ordinarily found in our houses has ever been directly associated in the minds of physicians with the cause of any particular class of diseases That this relation has not been made out before has not been from want of opportunities for observation and study. Cellars, as a rule, are damp and unhealthy, are the receptacles of stagnant and impure air, and oftentimes contain cesspools which are intended to supplement imperfect drainage. But even if every precaution is taken to guard against the ordinary objections, and every effort is made to supply the air to the furnace directly from the outside, the low level of the supply-shaft is such as to draw in the air from our filthy gutters, our indifferently kept streets, and in addition the sewer-gas which escapes at this level from the culverts. Next then to the sewer-pipe itself, the hot-air furnace may be considered as the most convenient contrivance of our times for endangering the health of the occupants of houses which have the usual "modern improvements" Although there are many other causes for contaminated air in our dwellings, these are perhaps the most important, and seemingly the most difficult of prevention. How to entirely overcome them is so much an open question, that for the present at least we have only to study, to labor, and to hope.

PRESCRIBING DRUGGISTS.

The Chemists and Druggists' Trade Association, of London, have passed a resolution, to the effect that in any case in which a chemist and druggist is threatened with legal proceedings for recommending simple remedies, when required to do so, in his own shop, it will undertake to defend him. Practically speaking, then, the London physicians are no better off than we are. Although they may be protected by a law calculated to punish such as infringe upon their professional rights, they are met with a determined resistance from the opposite side. The right to prescribe simple remedies in one's "own shop" is to be defended in the face of an explicit law to the contrary. Of course a great deal must depend upon the technical interpretation of what simple remedies may be, where in fact the line is to be drawn between the apothecary and the practising physician. If any definite distinction can be made between the two, it doubtless will be a source of gratification to the practitioner to know that, beyond a certain point, he is possessed of rights and privileges which even the ambitious and enterprising counter prescriber cannot question. At best it must be a matter of conscience with the apothecary, which, from a business point of view, amounts to very little.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Anniversary Meeting, Nov. 16, 1876.

Dr. S. S. Purple, President, in the Chair.

The twenty-ninth anniversary meeting of the New York Academy of Medicine was held in the Academy Hall on Thursday evening, November 16, 1876, commencing at eight o'clock. The exercises were opened by prayer by Rev. Dr. Ormiston.

Dr. W. T. White delivered the anniversary discourse, which consisted of a brief review of the advance that had been made in medicine during the past century, and especially the achievements which had been made by the profession in this country. The subject naturally gave rise to two questions: 1. How far had the great body of facts brought forward the progress made in the domain of physiology, chemistry, pathology, hygiene, etc., rendered the way more clear, and the means more perfect for the amelioration of human suffering and the cure of human maladies? and 2. By what instrumentalities and methods had such knowledge been promoted and diffused; in other words, how far had the progress in medical science been taught to the entire profession? The latter question was first considered, and the chief means for the promotion of medical knowledge were noted under three heads: 1. Medical Schools; 2. The Medical Press; 3. Medical Societies.

In a review of the history of medical colleges in this country, it was found that the first medical diploma conferred in this country was conferred upon Robert Tucker, in New York, in May, 1770. At the close of the eighteenth century 220 candidates had graduated from medical colleges in this country. At the close of the revolutionary war there were two medical colleges, and the increase had been to 84, of which about 60 were in operation last winter, with an attendance of 6,620 students, and a graduation list numbering about 2,200. The time was when the medical student pursued a two or three years' course of study in the office of his preceptor, and entered upon the practice of his profession without ever having had the slightest hospital experience or the opportunity to listen to a lecture in a medical college. To-day, however, with all the advancement made, the standard of medical education was not as high as it should be, and the colleges should demand a more thorough and extensive preparatory study. It was for the colleges to institute such a medical reform, but an obstacle

was met in the fact of so much competition among the colleges, each being interested in graduating as large a class as possible. To overcome the obstacles and secure the best men for graduation, it has been proposed either to have a board of examiners appointed, which should act independently of all medical schools, or to lengthen the term of college study one or two years. If either of these methods could be adopted it would make a good beginning, the faults of the present systems would gradually pass away, and the results would be beneficial both to the profession and to the public.

The medical press had been one of the most efficient means for the spread of medical knowledge, and had been growing in activity until at the present time 286 regular medical journals were published. Of these about 46 had an existence in this country, and were the sole survivors of 198 that had been commenced. The first medical journal was published in Great Britain in 1796, just one year before the *Medical Repository* was established in New York.

Medical journalism had accomplished an important purpose in the promotion and diffusion of medical knowledge, but its mission was still more important than it had been.

The influence upon the progress of medical science due to the organization of efficient medical societies was next considered. They had fostered a better social and professional feeling, were productive of good results when well managed, and by a united action were able to hurl aside the mischievous effects of empiricism. The oldest medical society in this country was established in the State of New Jersey in the year 1766—The New Jersey State Medical Society. In 1847 the American Medical Association was founded, and from it had emanated a code of medical ethics which was beneficial in holding in restraint those who otherwise would be disposed to become irregular, although the code was not by any means perfect.

The discoveries in medical science made during the past one hundred years formed the next topic of the discourse, and special mention was made of those which had their origin in this country. It was a notable fact that whatever advance had been made in organic chemistry, in physiology, in surgery, and in every branch of medicine and its kindred sciences the world over, had been accomplished by the labors of men belonging to the regular school.

Within the past twenty or twenty-five years there had been a tendency to the study of special departments, and a concentration of observations upon some single subject.

The germ theory of disease was alluded to, and although all the opinions had not been true, the faulty ones would destroy each other and assist in placing the doctrine upon a more sure foundation.

The progress in surgery had been increased by the four years of our late war, and the advance in that department had also been especially assisted by photography.

The society for the prevention of cruelty to animals was not passed, and it was believed that its workers had overleaped the limits of usefulness by a spurious zeal and an imaginary benevolence. If the well-meaning men were better informed, they would know that the physiological experimenter avoided the infliction of unnecessary pain.

To Dr. John Stearns, the first President of the New York Academy of Medicine, was due the introduction of ergot as a therapeutical agent, and to Dr. McDowell, of Kentucky, was due the credit of first performing ovariotomy, an operation which since its introduction had been the means of saving the lives of two thousand women. A century ago, gynecology was scarcely known. In no other country had such distinct lines been drawn between the regular profession and the numerous avocations which did not belong to it, and it was one of the intentions of the New York Academy of Medicine to afford a means for distinguishing between the regular and irregular medical practitioner. "There had ever been a readiness to recognize faith in the medical heart among all conditions of men, but that faith had been purest and deepest when medical societies and science had been best cultivated in their several departments for the welfare of human beings."

Dr. Barker moved that the Academy extend a vote of thanks to Dr. White for his cool, cautious, and temperate relation of facts, and the excellent taste manifested in his discourse by avoiding everything like extravagant pretension or claim. The motion was unanimously adopted.

The Academy then adjourned.

Correspondence.

IS ALCOHOL A FOOD?

To the Editor of The Medical Record.

Sir:—In order to answer the question that caps this article, we must first decide what we understand by the term "food."

What, then, is a *food?*

Physiologists generally agree in defining it to be any substance which furnishes to the body constituents necessary for its alimentation, or prevents their removal. The purposes which foods serve in the economy are chiefly to generate heat and to produce and maintain the structures under the influence of life and exertion. The physical effects of the ingestion of food are mainly:

I.—*Increase in the exhalation of CO_2.*

II.—*Increase in the force and frequency of the pulse.*

III.—*Increase in the bodily temperature.*

IV.—*Diminution in the amount of urea eliminated.*

The evidence that ingesta are nutritious, is that, being consumed in the body, they are not found in the excreta in disproportionate quantities.

To recapitulate. Foods generate heat, maintain functional power under exertion, this action being carried on chiefly by three elements: O, H, and C. The effects of ingestion are increase in CO_2, pulse and temperature, and diminution of urea. Foods are used up in alimentation not appearing *sui generis* in the excreta.

Alcohol has a twofold action on the economy, varying with the quantity ingested. It may be defined as *constructive* and *obstructive*. The first representing its non-narcotic or purely food action, the second its narcotic or poisonous action, under the influence of which, paralysis of the sympathetic takes place and various vital processes are deranged.

In claiming for alcohol nutritive power, we must be understood as limiting the term to its use in such doses as stop short of the characteristic physiological manifestations of the drug. When, however, the line that separates the non-narcotic *constructive* action from the narcotic *obstructive* is once ove stepped, then does alcohol cease to be a food and becomes a poison.

It will be certainly unnecessary to take up your

valuable space sufficiently to quote fully the experiments which substantiate that alcohol, in its action limited as above, is as truly a food as the amylacea or albuminoids, it will be sufficient to merely allude to them, as they are within the easy reach of all.

Alcohol in *constructive* doses, in common with other foods, *increases the elimination of* CO_2 (substantiated by the experiments of Dr. Edward Smith, and given in his work on Foods); *increases the frequency and force of the pulse* (proven by the elaborate experiments of Parkes and Wollowicz upon man with the sphygmograph); *checks the elimination of urea* (shown by the experiments of Dr. W. A. Hammond upon himself, and confirmed by Parkes and Wollowicz); is *not* found in the excreta in more than very limited quantities (supported by Baudot, Schulinus, Anstie, Thudichum, and Dupré). Further than this, the experiments of Dr. Ford in demonstrating the presence in the blood of alcohol as a result of the disintegration of the hepatic sugar, confirmed by Dupré and Béchamp, *the generation of heat, and so force*, proven by Dupré by convincing experiments, completes a chain of evidence most strong, and is a sufficient refutation of the argument of those who, either through scientific obtuseness, or a mistaken zeal in the cause of temperance, obstinately shut their eyes to the results of careful and exact research. As a late correspondent of yours from Orange, Mass., denies that alcohol should rank among the heat-producing foods, I would like to refer him to the testimony of Dupré in the *London Practitioner* for 1872, Vol. IX., page 33. Dupré here demonstrates that "one gramme of alcohol oxidized in the body evolves 7,184 units of heat, while the same weight of lean beef gives off only 1,482 units of heat. 9.3 ounces of lean beef, equal to about two ounces of alcohol, will supply enough force to keep up and maintain for one day the circulation and respiration of an average man, *i.e.*, four ounces of strong spirit will suffice for this purpose."

The modest statement of your correspondent, that had Dr. Anstie lived to this day, he would have suffered his principles to undergo a radical change upon this subject, is too purely gratuitous for serious notice.

Halsey L. Wood, M.D.

62 North Street, Auburn, N. Y., Nov. 13, 1876.

To the Editor of The Medical Record.

Dear Sir:—Under the above caption, Dr. Stimson, in a previous issue, refers to my communication on the same subject, and says that "Dr. Mays seems to desire to support the theory that alcohol is a food," and then asks, "Does it (alcohol) contain those elements which replenish the tissues of the body," and after alluding to the teaching of organic chemistry, he decides this question in the negative. Again, he asks, "Is it then a force, supplying food?" This he answers with an emphatic "No," and in order to substantiate his refutation of the last question, he further says, "Hydrocarbons produce force by oxidation. Alcohol is a hydrocarbon, and, if consumed in the body, *must produce heat* (the italics are ours) in order to rank among the heat-forming foods," and he then refers to the experiments of Dr. W. B. Richardson, of Edinburgh, which, he says, "go to prove that instead of producing animal heat, it diminishes the heat of the body."

Now, with the first conclusion at which the Doctor arrives, we have no reason or disposition to find fault; but with regard to the second we will say that it would be true if heat was the only force generated by foods in the body, but that it would be a most fatal and unscientific test (with which he assumes to decide whether or not alcohol can be classed among those substances which have the capacity to generate bodily force), were he to apply the same mode of reasoning to other hydrocarbon foods, the force-producing power of which no one doubts. For if the distinguishing characteristic of a hydrocarbon food exclusively depends on the expenditure of its force in the shape of heat while undergoing oxidation in the body, what then becomes of fat, starch, and sugar; one gramme of each, according to Prof. Frankland, has the capacity to produce 9,069, 3,912, and 3,348 heat units respectively, when oxidized outside of the body. ("Each heat-unit represents the heat required to raise one gramme of water 1° Cent. or 1.8° Fahr.") In other words, this means that by the oxidation of one pound of beef-fat, a sufficient amount of heat is generated to elevate "the temperature of 9,069 lbs. (about 4 tons) of water 1° Cent. (1.8° Fahr.); that the oxidation of the same quantity of arrow-root will similarly raise the temperature of only 3,912 of water," etc. (Pavy, "Food and Dietetics.") Now it is very evident that the energy which these substances possess cannot be solely expended in the production of heat while undergoing oxidation within the body, for if this were the case the heat of the body would be raised to a degree incompatible with life, whereas the truth is that the temperature of the body after the ingestion of a meal is elevated to but a slight, and sometimes to an inappreciable degree. Nor indeed is this latter view at variance and inconsistent with what we would be led to anticipate from our knowledge of what is required to carry on the processes of nutrition and oxidation in the body, for we know that there is other work to be performed in the animal economy besides that of maintaining the bodily temperature at a certain uniformity.

The physiologic facts are these: All our hydrocarbon and carbohydrate or force-producing foods are oxidized within the body, and the force or energy which they possess, and is thus set free, is destined to perform "interior work," such as nervous muscular and other work. Now it is a physical axiom that that force which accomplishes nervous, electric, chemical or mechanical work cannot manifest itself as heat-force at the same time. Hence it is an obvious absurdity to hold that a substance cannot be a force-giving food merely because its force does not appear in the same form within as it does when oxidized outside of the body. There is no doubt that alcohol in certain quantities behaves in the very same manner within the organism as do other foods of the same nature; if not, then it is the most extraordinary and exceptional substance in existence, for Drs. Anstie, Dupré, and others have proven that the body is capable of consuming one ounce and a half of alcohol, thus setting free a larger amount of force than do most of our other force-yielding foods, and this view is in perfect accord with the ideas of the late and much lamented Dr. Anstie, as expressed in his "Final Experiments on the Elimination of Alcohol," published in the *Practitioner*, (vol. xiii.) as follows: "I think I may take it as conceded that quite 600 grains of absolute alcohol can be disposed of daily within the organism of an adult male without any perceptible injurious effect upon the bodily functions. Now, this quantity of alcohol is (theoretically) capable of generating an enormous amount of force; but it is equally certain that that force does not show itself under the form of heat."

If space permitted, we could detail the conclusions

which we are warranted to draw from scientific data concerning the kind of work which alcohol performs within the body, but we have no desire to encroach, and, therefore, beg leave to refer to a paper entitled "The Principles of Antipyretic Action," which we are preparing, and will be published shortly, in which this phase of its action is discussed, not only in relation to the manifestation of its energy in other than heat-force, but also its power to reduce the bodily temperature under certain circumstances.

It is a lamentable indication of the present state of therapeutics (if such logic can be taken as a fair specimen) that a person who desires to give an intelligent and scientific expression of his views should erroneously substitute the toxic for the therapeutic action of a substance, and allow his ideas to be governed to such an extent by the one-sided and inadequate experiments and conclusions of Dr. Richardson, as to believe that they are finally decisive on the alcohol question. For any one who has given any attention to this subject must know that the four stages into which Dr. Richardson divides the action of alcohol are but the "progressive changes" of the effects of alcohol in narcotic and poisonous doses, and have nothing in common with the action of alcohol in small and dietetic doses. The effects from the first to the last as noticed by Dr. Richardson and quoted by Dr. Stimson, are produced only by large and unoxidizable doses of alcohol, and are directly the reverse of those which are produced by small and oxidizable quantities. It would be just as unfair to represent the emetic action of ipecacuanha as the only therapeutic effect of this remedy, when the truth is, that in certain circumstances and certain doses it is also anti-emetic; and the same holds true of many other substances which have a twofold action on the human body.

Dr. Stimson would certainly be very welcome to the gratuitous assumption that Dr. Anstie would probably have reached similar conclusions to those of Dr. Richardson, "had not his useful life been cut short as it was;" and it would appear more graceful, were it not known that Dr. Anstie described those identical effects of alcohol in a very comprehensive and scientific manner in his "Stimulants and Narcotics," nearly twelve years ago.

Sincerely yours,

THOS. J. MAYS, M.D.

UPPER LEHIGH, PA., Nov. 15, 1876.

A CURIOUS CAUSE FOR VOMITING IN AN INFANT—A BRASS RING HOOKED OVER THE EPIGLOTTIS.

TO THE EDITOR OF THE MEDICAL RECORD.

DEAR SIR:—I send you the following case for publication, if you think it will prove of sufficient interest to your readers.

One morning during the last week in October a little child, eleven months of age, was brought to my office for advice. The mother, an intelligent American lady, told me that the infant had been perfectly well up to seven o'clock on the previous evening, when it was suddenly seized with a slight attack of vomiting, and since that time it had refused the breast. She also said that she had lost a child with diphtheria about two years ago, and she now feared that this one had something the matter with her throat, because she would not nurse. The child was sleeping quietly in its mother's lap when I commenced my examination. There was no dyspnœa, and no increase in the normal frequency of the respirations. The pulse was regular in force and action, the skin was cool and natural, and, as far as I could judge from external signs, there was nothing wrong with the child. Upon inquiry I could elicit nothing which would explain the symptoms that the mother had described, until at last I learned that a short time before the vomiting came on the baby had eaten a small piece of banana, which the mother had given her. Here seemed to be a sufficient cause to account for the whole story, and an examination of the throat appeared to be a useless formality. Still, as the attention of the mother had been fixed upon this part of the body as the seat of the difficulty, I depressed the tongue and looked into the throat. Much to my surprise, I must confess, I saw a glistening object deep down in the pharynx. A second look brought it more clearly into view, and by the aid of a pair of forceps I removed, without difficulty, a small brass finger-ring which had, no doubt, been picked up by the child while creeping about the floor on the previous evening. It belonged to a sister of the patient, and the mother remembered that the children were playing with it on the night before. The ring was just large enough to fill that portion of the pharynx in which it was lodged, and was so placed that its axis corresponded pretty closely with the axis of the œsophagus, the anterior portion being caught and held in place by the epiglottis. The vomiting which took place was in all probability excited by ineffectual attempts to swallow or to reject it, and not by the presence of the piece of banana in the stomach, as I at first supposed; but the effort, although it may have changed the original position of the foreign body, had not sufficed to remove it. Deglutition was not much interfered with, for the child had swallowed water during the night, according to the mother's account, without apparent difficulty; but the muscular movements necessarily involved in nursing were no doubt productive of pain in the throat, and hence the refusal of the child to perform this function.

This case, simple as it is in itself, seems to me to point with more than ordinary directness to two important features. The first is the value of close observation, on the part of those who have the care of infants and little children, to detect the earliest indications of disease or derangement, and to seek advice for such as seem to require professional aid, instead of waiting to try the effect of domestic medicine, as so many people are prone to do. A delay for a few hours longer might have converted this case of simple mechanical obstruction into a dangerous and perhaps fatal malady. The second point is the importance, on the part of the physician, of never neglecting the investigation of any clew, no matter how slight, which may be of use in making a diagnosis. Often, it is true, such close attention will turn out to be a mere waste of time; but once in a while, as in this instance, a little trouble will amply repay one for any number of former unprofitable efforts.

Very truly yours,

W. R. FISHER.

HOBOKEN, N. J., November 11, 1876.

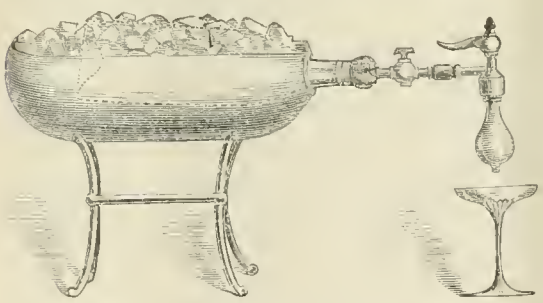
UNDERLYING A LIQUID IN A TUBE.—Dr. L. A. Frost, of Mechanicsburg, Ill., writes to us describing a convenient and ready method of underlying one fluid by another. He simply takes an ordinary test-tube, heats its centre over a spirit lamp, and draws out the bottom into a capillary tube, which in its turn is bent so as to be parallel with the original tube. The capillary tube is made as long as the other for obvious reasons, and its extremity expanded into a funnel. The fluid is poured into the larger tube, and the fluid intended to underlie it is poured into the funnel-shaped extremity of the capillary tube.

New Instruments.

WARKER'S IMPROVED SYPHON.

Mr. Thomas Warker, of this city, has devised an apparatus for the administration of sparkling wines, which promises to be of the greatest utility to physicians. It is well known, whenever wines charged with carbonic acid gas are prescribed for our patients, that after the bottle containing it has been opened and the first dose is taken, that most, if not all of the sparkle disappears, and, as far as any good to be obtained from the gas itself is concerned, it is virtually inert. The French contrivance of introducing a faucet with stop-cock through the cork, although apparently sound in theory, was found radically defective in practice. The wine was discharged with a spurt, and with considerable force, but contained little or no gas after the first glass was drawn. Mr. Warker, after a careful study of this phenomena, discovered that the object aimed at in this and all other similar contrivances—namely, the discharge of the wine under pressure—was the real cause of the loss of the gas in the glass. This theory, it seems to us, is abundantly substantiated by the ordinary method of obtaining the wine from the bottles. The operation of removing the cork is the signal for the discharge of the extra and supernatant pressure; the wine is then simply poured in the glass, and, if not allowed to stand too long, retains its accustomed sparkle. If, however, the entire contents of the bottle are not used within a reasonable time after being opened, we have also a loss of the carbonic acid which it contains. In this instance the gas escapes from the liquid because there is not sufficient pressure above to prevent it.

It is necessary to appreciate these facts in order to understand the principles upon which his contrivance is based. His objects are, first, to maintain the pressure in the bottle, or the ordinary syphon, as the case may be; and secondly, to discharge given quantities without subjecting them at the moment of their discharge to any pressure whatever.



The apparatus, as seen in the cut, consists of a bottle of champagne, the cork of which is perforated for the reception of a tube connected with an extra or receiving chamber. When a small quantity of wine is to be drawn, a direct communication is opened between the chamber and the bottle by means of a valve, and, when a sufficient quantity of the wine has escaped in the small receptacle, the valve is closed. The bottle and the extra chamber are then entirely independent of each other, and the pressure in each is relatively the same, and can be so maintained as long as desired. When the wine in the chamber is required, the opening of a compound valve relieves the pressure of the supernatant gas, and the wine thus relieved gently flows into the glass, containing even more gas than when poured from a freshly-opened bottle. As can easily be seen, this operation can be repeated with the same result until the bottle itself is exhausted. The practical application of this principle enables the physician to prescribe sparkling wines not only from syphons, but from the original bottles, and still preserve the sparkle until the entire contents are used. Aside from this, means are now afforded, by attaching this supplementary chamber to the nozzle of the ordinary syphon apparatus, of charging still wines, brandies, and even noxious draughts with gas, and administering them to our patients ad libitum. The question which naturally suggests itself in this connection is, why champagne and similar wines cannot be treated as the ordinary mineral waters, which are known to retain a certain amount of gas when discharged under pressure. The answer to this is, that Mr. Warker has found that, while mineral waters will so behave, the wines are governed by a different law, and hence the opposite result. Another advantage of this contrivance is the possibility which it affords of administering the different mineral waters charged with gas, and at different temperatures. Carlsbad, for instance, can be drunk at its natural elevated temperature, without suffering from the loss of its carbonic acid, which would be the case under other circumstances. Altogether, the scientific principle involved in this contrivance is as interesting to the physician as its practical application is destined to be beneficial to his patients.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from November 19 to November 25, 1876.

Gibson, J. R., Asst. Surgeon. Assigned to duty as chief medical officer of the Powder River Expedition. S. O. 156, Dept. of the Platte, Nov. 16, 1876.

Williams, J. W., Asst. Surgeon. Assigned to temporary duty with the troops at Washington Arsenal. S. O. 240, A. G. O., Nov. 22, 1876.

Patzki, J. H., Asst. Surgeon. Assigned to duty at Fort D. A. Russell, Wyoming T. S. O. 154, Dept. of the Platte, Nov. 14, 1876.

Dickson, J. M., Asst. Surgeon. Assigned to duty with 16th Inf. in New Orleans, La. S. O. 224, Dept. of the Gulf, Nov. 18, 1876.

Hoff, J. V. R., Asst. Surgeon. To accompany Co. G, 23d Inf., from Fort McPherson, Nebr., to Fort Fetterman, Wyoming T., and, on arrival, relieve Asst. Surgeon Gibson from his duties as Post Surgeon at that post. S. O. 156, C. S., Dept. of the Platte.

Barnett, R., Asst. Surgeon. Assigned to duty with battalion of 3d and 13th Infy. in New Orleans, La. S. O. 224, C. S., Dept. of the Gulf.

Crampton, L. W., Asst. Surgeon. Leave of absence extended one month. S. O. 132, Div. of the Missouri, Nov. 17, 1876.

Taylor, M. E., Asst. Surgeon. Assigned to duty with 3d and 13th Infy in New Orleans, La. S. O. 224, C. S., Dept. of the Gulf.

Rose, G. S., Asst. Surgeon. Died at Madison Barracks, Sackett's Harbor, N. Y., Nov. 20, 1876.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending November 25, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Nov. 18.....	0	12	46	3	3	60	0
" 25	1	13	50	3	4	55	1

OFFICE THIEVES.—We are again reminded that office thieves are beginning to ply their trade.

Dr. C. M. of this city writes:

"SIR:—I think it my duty to drop you a line, as Editor of the MEDICAL RECORD, to ask you to warn the profession against a thief who is calling at the residences of the doctors just after their office-hours. He gave me a call on Saturday, and took a very fine bronze clock. He probably uses the same method with others as at my house. Observing me go out, he immediately called and told the girl he had just met me, and I had told him to wait—a plausible story. He is a tall, gentlemanly-looking person, black hair, black moustache and goatee. C. M."

NEW YORK, November 20, 1876.

The above letter calls attention to a comparatively new device for this class of sharpers. As the physician is more than ordinarily exposed to similar ones, it becomes him and his servants to be constantly on the alert. Under present circumstances it is a good rule to allow no stranger to enter an office during odd hours, merely to wait until the doctor may return. A desire to do so, on the part of a stranger, should at once arouse a suspicion. The wish on the part of the servant to be civil should not interfere with a request that the supposed patient shall call at the proper time, or leave his message. The neglect to do so has been the occasion of the loss of much valuable property, such as microscopes, surgical instruments, pictures, and clocks.

The most expert office thieves are generally females who, pretending to be very much disappointed at not finding the physician at home, and assuming to be much exhausted, ask to rest themselves for a while. If the physician happens to be at home they are ready to detail the history of some "womb trouble," and even submit to vaginal examination in order to save appearances. The suspicious circumstance of this manœuvre is the awkward discovery that they have forgotten their pocket-book. If these swindlers ever call a second time they will be careful to know beforehand that the physician is not at home.

It is impossible to detail the various tricks which are resorted to by these impostors. We have in mind the following amusing case, which may have a parallel in the experience of others. A female not long since called at our office during our absence, expressed great disappointment, but asked to wait a few moments for her carriage. There being no denial for such a reasonable request, the servant purposely busied himself around the office until the said carriage arrived. A day or two afterwards we learned from the proprietor of a livery stable in the neighborhood that a female answering the description of our would be patient had ordered the carriage in our name. The fact that she had visited many questionable places, aroused a suspicion in his mind which we speedily confirmed. Had the thief been allowed the usual facilities of appropriating any article of value within her reach, the coach would have been a very convenient means of transportation.

But, as we before remarked, this is only one of many methods of sharp practice to which physicians are liable; and as prevention in these cases is so much easier than cure, we believe that the motives of our correspondent in giving his late experience will be duly appreciated.

PRONUNCIATION OF THE NAMES OF GERMAN AUTHORS.—The following key to the pronunciation of the different authors' names in Ziemssen's Cyclopædia has been prepared for the purpose of promoting greater uniformity in the pronunciation of these names. It is scarcely possible to show, except *viva voce*, how the German *ue*, or *ch* (or *ig*) should be pronounced; and, even if the proper pronunciation could be shown, probably very few physicians would ever attempt to employ it in ordinary conversation. Hence, the sound of *u* in *ruler* has been substituted for that of the German *ue*, and the sound of *k* for that of *ch*. As such names as Wagner, Thomas, Weber, etc., have already been acclimatized in our language, it is doubtful whether it would not rather add to the confusion to pronounce them as Vargner, Toemar, Vayber, etc. Still, for the sake of completeness, they have been included in the following list. The English pronunciation of the letters *st* is both easier to use and pleasanter to hear than the German *sht*; the latter pronunciation has, therefore, been omitted in the following list. Finally, no attempt has been made to reproduce the soft sound (in French) of *j* before *o*, as in Jolly.

Boehm	Birm.
BARTELS.	
Bollinger	Bol-lin-gur.
Baeumler	Boym ler.
Curschmann	Coorsh-man.
Duchek	Dew-shek.
Ebstein	Abe-stine.
Eulenburg	Oy-len-boorg.
Erb	Airb.
Friedreich	Freed-rike.
Frantzel	Fren-tzel.
Fraenkel	Freng-kel.
Geigel	Guy-gel.
Heubner	Hoybner.
Hertz	Hairtz.
Hitzig	Hitz-ic.
HELLER.	
Haenisch	Hay-nish.
IMMERMANN.	
JOLLY.	
Juergensen	Yure-găin-sen.
Kussmaul	Koos-mowl.
Liebermeister	Lee-ber-my-ster.
Leichtenstern	Like-ten stern.
Lebert	Lay-bert.
Leube	Loy-ber.
Mosler	Moze-ler.
Nothnagel	Note-nar-gel.
Naunyn	Now-neen.
Obernier	Oh-bairn-yea.
Oertel	Err-tel.
PONFICK.	
Quincke	Quincker.
Riegel	Ree-gel.

Ruehle	Ruler.
Rindfleisch	Rinnd-flȳsh.
Rosenstein	Rosen-stine.
Schroeder	Shrur-der.
Seitz	Zytes.
Schroetter	Shrur-ter.

STEFFEN.

Steiner	Sty-ner.
Senator	Sen-a-tore.
Thomas	Toe-mar.
Thierfelder	Teer-fel-der.
Vogel	Fo-gel.
Wyss	Viss.
Wendt	Vent.
Weber	Vay-ber.
Wagner	Varg-ner.
Zenker	Tzen-ker.
Zuelzer	Tzool-tzer.
Ziemssen	Tseem-sen.

FRENCH INTERNES.—The appointment of "interne" of French hospitals is held for four years, during which time transfers are made from one institution to the other, affording an extensive experience in the general and special parts of the profession. The custom in New York hospitals is to limit these appointments to eighteen months each.

STATE BOARDS OF HEALTH.—Eleven States now have State Boards of Health. Massachusetts led the way in 1869. She was followed in 1870 by Louisiana and California; in 1872 by Virginia; in 1873 by Minnesota and Michigan; in 1874 by Maryland; in 1875 by Georgia and Alabama; and in 1876 by Wisconsin and Colorado. When the State Board of Health was organized in Michigan, Dr. Hitchcock said that the loss to the people of that State caused by preventable sickness was more than $2,000,000 per annum. "It is our office, then," said he, "to make the labors of this Board popular with, because useful to, the people of the State. Here," he continued, "is the work for this Board to do; to educate the people in respect to the nature and causation of diseases, and the means for their prevention; to suggest appropriate legislation for compelling, when necessary, the use of these means; and to present arguments for such education and legislation, fortified and made cogent by facts, well authenticated cases of disease and death directly traceable to ignorance, neglect, or disobedience of the laws of hygiene; and to make it possible by this work that many, if not all, the lives and much of the treasure now needlessly lost to the State may be saved." Imbued with the same spirit, the members of the Wisconsin Board recently met at Madison and organized for labor.—*Sanitarian.*

A NEW FORM OF ASPIRATOR.—The London *Lancet* (Nov. 4) calls attention to a new form of aspirator devised by Dr. Gritti, of Milan: "The instrument consists simply of an ordinary double-ended india-rubber syringe, resembling the common Higginsou's syringe, to the tubes of which are affixed nozzles adapted to fit into the aspirating needles or trocar. Before using the instrument for aspiration the ball and tubes are to be completely filled with water, and after introduction of the needle into the chest (if in a case of pleurisy) the inlet tube is fitted on to the needle, and the instrument worked in the ordinary manner until the desired amount of fluid has been evacuated. If it be needful to inject any disinfectant or other solution after removal of the fluid, this is readily accomplished by reversing the apparatus and fitting the outlet tube to the canula or needle. If the capacity of the ball be previously ascertained, the number of strokes needed to inject any given quantity affords a ready method of measuring how much is thrown in. The apparatus appears to us to possess many advantages, provided always that the suction power of the syringe is sufficiently great. It affords a method of removing the fluid gradually, and with an even pressure throughout the operation; it is portable, cheap, and readily replaced, and it does away with the necessity for a complicated apparatus, the stopcocks of which are a puzzle to the uninitiated, and which is a source of alarm to the patient. Added to this is the advantage of its ready reversal. Should it be found a success, it will be another proof of the simplicity of useful inventions."

INFLUENCE OF PINE FORESTS ON THE RAINFALL.—Some interesting observations have lately been made by M. Fautral on the influence of pine forests on the quantity of rain received by a country, the hygrometric state of the air, and the state of the ground. It is proved that pines have the property of condensing vapor, and that in a much higher degree than leafy woods. Thus the quantity of rain which fell over a pine forest during fourteen months was 840.70 mm., as against 757.75 mm., on the open ground three hundred metres off, showing a difference in favor of the forest of more than 10 per cent. of the latter quantity. In the case of oaks and witch-elms the difference was only 5 per cent. The mean saturation of the air above the forest was ten-hundredths more than at the other station (63 against 53). The quantity of rain received by the forest ground was 471 mm., while 369 mm. was interrupted by the trees—*i.e.*, 0.43 of the water precipitated. Now, though the open (sandy) ground received 757 mm., there is reason to believe that the forest ground really conserves more water. These data show what services may be rendered by pine forests on burning, sandy, or chalky plains, which the want of water renders unproductive. Such forests, too, are a powerful remedy against inundation.—*Medical Press and Circular.*

RETURN OF THE SECRETION OF MILK.—It is well known to foreigners resident in China, that the Chinese women who have borne children are able to excite anew the secretion of milk years after the last child had been weaned. Dr. Muller reports two cases of this curious phenomenon that were observed by him. A woman, aged 30 years, whose breasts were completely retracted, and had been inactive for six years, took a child six months old, which she placed frequently to her breasts, confining herself at the same time to a special diet. Ten days later the milk began to be secreted, and after six weeks Dr. Muller found the breasts firm and well developed, and pressure caused a stream of milk to flow out. The menses ceased while this lactation continued. The general health was very good. By similar means the secretion of milk was re-established in a woman forty years of age, whose youngest child was nine years old, and had not been nursed for six years. In this case menstruation did not stop, but it became less abundant. In a third case the attempt to re-establish the secretion of milk excited such disturbances of the general health, that it had to be discontinued. In the two first cases the milk was carefully examined and found to be normal; its spec. grav. was 1030.

AN IRON CALCULUS.—A man in Paris recently passed a urethral calculus the size of a hazel-nut. Its passage was attended by severe nephritic colics. M. Cazeneuve found, on examination, that it was entirely composed of almost pure peroxide of iron.

Original Lectures.

CLINICAL LECTURES ON ACUTE DIARRHŒA.

DELIVERED IN BELLEVUE HOSPITAL,

By W. H. THOMSON, M.D.,

PROF. OF MATERIA MEDICA, MEDICAL DEPARTMENT UNIVERSITY OF NEW YORK.

LECTURE II.

We have dwelt at such length upon the causation and the treatment of infantile diarrhœa, because the principles then enunciated are equally applicable to the commoner forms of acute diarrhœa in adults. In brief, we might say that the majority of cases of summer diarrhœa are caused by a fermentation of the intestinal contents due simply to a deficiency of the normal digestive secretions; and therefore, that the first indication is to remove the fermented matters, and then to re-establish the flow of the natural juices. This is a different view from that usually entertained by our patients, viz., that we should give them something which will act as an immediate check to the flux; and hence a beginner is often unconsciously influenced by this natural impression of theirs towards administering opiate and astringent mixtures without delay. But nothing will check a diarrhœa so soon or so well as a single day's flow of natural secretions. Could we artificially prepare an exact counterpart of them both in their antiseptic and their solvent properties, I doubt not that we would find such a mixture the best astringent for diarrhœa possible. The question for us to ask, therefore, is, what secretions are probably the ones most deficient or perverted in this affection, and how best can we restore them.

In the first place, it is not likely that the gastric juice is as lacking in a case of acute diarrhœa in an adult as it is in infantile diarrhœa. In dysentery, on the other hand, there are reasons to suspect a notable deficiency of gastric secretion, as I will explain presently. But in ordinary summer diarrhœa the symptoms of gastric dyspepsia are not usually very marked, at least not at first, and not until the system is beginning to feel quite sensibly the effects of the disorder. It is not uncommon for the patients to have a good appetite for several days after the diarrhœa commences, and to feel uncomfortable only when the stage of gastric digestion has been passed for some time. Diarrhœa also, properly speaking, does not implicate the large intestine nor depend upon an abnormal state of its secretions, for when indications of dysentery set in, we have a train of symptoms which plainly contrast with those of diarrhœa. A patient with dysentery is disturbed by food almost immediately after it has entered the stomach, so that in many cases nothing is so calculated to excite a desire for stool as the partaking of an ordinary meal. In dysentery, therefore, whether acute or chronic, it is very common to note the unaltered smell of the components of a dinner. A patient of mine once said that he could detect in a dysenteric discharge the odor of a small piece of beefsteak which he had eaten but a short time before. It is on this account that you will probably never meet with such specimens of pure starvation as in some children with dysentery, who will void the milk they take almost immediately after it has been swallowed; but such an occurrence is not to be expected in a case of true diarrhœa, no matter how profuse or frequent the discharges may be.

The explanation of this difference between these allied disorders is to be found in the nervous mechanism of the alimentary canal. There appears to be in health a mutual understanding, so to speak, between the sensory nerves of the stomach and those of the rectum. The natural time for an evacuation from the rectum is directly after breakfast, that is, when the stomach receives food after its longest period of rest. Irritation of the rectum, on the other hand, seems by this alliance to be reflected upon the pylorus to so paralyze its sphincter-like action, that the food is not delayed long enough in the stomach to be acted upon, and hence it is then equally unfit for intestinal digestion, and is hurried on to be voided as soon as possible. I may remark in passing, that the consideration of such facts in the nervous connections of the digestive canal as this feature of dysentery illustrates, has appeared to me to afford a hint of the cause of the abnormal appetite which characterizes certain cases of nervous disease, as in epilepsy, insanity, etc. The sense of hunger has its seat mainly in the gastric nerves. In these cases I allude to, the nervous disease is always accompanied by a hurry in swallowing. The patients bolt or gulp their food and drink, and it seems reasonable to infer, that along with intestinal paralysis and constipation in them, there is still the same hurry in the action of the stomach, which empties itself into the sluggish intestine before the hunger is appeased, as it would be if the food remained long enough in contact with the gastric walls.

But to return. The commonest period both for the onset of diarrhœa and for its most abundant discharge afterwards, is early in the morning, indicating an accumulation above the cæcum during the rest of sleep. Dysentery, on the other hand, is most relieved by rest, and most excited by movement of the body, and also, as we have just stated, by a meal. Diarrhœa, therefore, is generally due to a disorder in the secretions which empty into the small intestine, and of these we may be sure that the duodenal secretions are the most frequently affected. Among many indications of this in the acute forms, we may frequently note that both preceding and accompanying its development we commonly find a muddiness of the conjunctivæ, and yellowish streaks about the mouth and a muscular languor, with slight aches around the shoulder and down the back, which are rightly diagnosed by the patients themselves as signs of "biliousness." Now there are a great many causes operating during the hot months, which may with much probability be regarded as effective in changing the character of the secretions which empty into the duodenum. All vegetable acids, for example, when taken in excess, have a greater tendency to neutralize the alkalinity of these secretions than we find in the case of the mineral acids. I doubt, for instance, whether there is anything so certain to cause an obstinate looseness of the bowels as a persistent use of lemonade. The acids of fruits, when in excess, I believe, therefore, are quite as "bilious" as fats can be, and quite as frequent causes of diarrhœa as their presumably indigestible pulp. Moreover, the biliary and the pancreatic secretions, taken together, are among the densest secretions of the body, and a too free ingestion of water, even when pure, may dilute them too much for their proper action. But water in warm weather is often anything but pure, and how much of perversion is caused by its condition it is difficult to say. If, as is believed by many, the malarial poison is introduced as frequently by what we drink as by what we breathe,

we may have another potent cause for the duodenal secretions becoming affected by our yielding too freely to the demands of thirst on a summer's day. But we need not multiply such surmises as to the genesis of these perversions, for all we wish to illustrate by them is the probability that an effort to increase the alkalinity of the intestinal fluids, and along with this to administer medicines containing both resinous and antiseptic ingredients, would seem to offer the most rational prospect of relieving the disorder.

Now among all our remedies, there is not one which appears to increase the flow of the natural secretions of the bowels like rhubarb; for while the cathartic oils act mainly by producing a catarrhal condition of the mucous membrane, and the irritant resins by an operation similar to the irritation of the intestinal fermentation itself, and the salines by preventing the water in the intestine from being absorbed, rhubarb causes the dejecta to present more normal characters than any in the list. It is often pronounced an astringent on account of the rheotannic acid which it contains. But tannic acid itself in anything like the small doses which would correspond to the astringent ingredient in rhubarb, would show but little control over a flux, and hence the constipation which often results after a dose of rhubarb ought to be explained otherwise. The normal secretions restored by the operation of this remedy, are themselves the causes of the stoppage of the flux, and the constipation which follows is nothing more than a natural result of the previous over-stimulation of the intestinal secretions. The common addition of alkalies, like soda and magnesia, is justified by the considerations already advanced of the necessity for alkalinity in the intestinal juices, while the still further addition of spices or aromatics supplies the indication for antiseptics. The oils contained in spices, like cloves, ginger, cinnamon, etc., are close allies chemically with phenic or carbolic acid, and hence their preservative powers, which are made use of in pickling, etc. But it is not so generally known that camphor, oil of peppermint, and notably oil of winter-green (Gaulotheria Procumbens, not the Pipsissewa), are equally members of the chemical series to which carbolic acid belongs. From oil of winter-green also, salicylic acid can be derived even more readily than from salicin itself; while it illustrates the relationship which I have just mentioned between these various vegetable products, to know that salicylic acid is now chiefly made from phenic acid itself.

In recommending these old remedies, therefore, whose value experience has shown for so long, I have aimed to explain why they are beneficial, in order to prevent you from giving them up too soon under the temptation to resort to opiates and astringents. You rarely relieve an acute diarrhœa by these last, unless it be already nearly cured by natural means; but I have seen many instances of chronic diarrhœa which had become quite difficult to arrest, from what I believed to be a too early and persistent use of opiate and astringent mixtures. Opium is a very effective agent for suspending digestive secretions, as is often disastrously shown when it is administered to check the cough of phthisis, and hence I give it in diarrhœa only after the failure of the first remedies recommended, and then generally in combination with them or with other adjuvants to be mentioned presently. The first prescription for an adult, therefore, would be something like this: ℞ Magnes. sulph. ʒ vi.; Syr. rhei arom. ℥ iiss.; Ol. gaulotheriæ gtts. x.; Aq. menthæ ad ℥ vi. M. S.—Tablespoon every three hours.

Should the irritation, however, produced by the fermentation be so great as to cause a condition of persistent intestinal catarrh, we may then have recourse to astringents; but if so, I must prefer the mineral acids to the vegetable astringents, and would alternate with the above prescription the following modification of Hope's Mixture: ℞ Acidi nitr. dil. ʒ iv.; Tr. camphoræ, Tr. opii, āā ʒ iss.; Syr. zingiberis, ℥ i.; Aq. cinnamomi ad ℥ iv. M. S.—Two teaspoons in a little water. It is only when the intestinal inflammation reaches such a degree that fever is developing, that you should have recourse to more active astringent measures. Should such a condition arise, the indication for the administration of the acetate of lead is plainest, because it is the only astringent we possess which is also a local sedative to inflammation, while the other mineral, and still more the vegetable, astringents are local irritants.

Original Communications.

LISTER'S ANTISEPTIC METHOD IN OVARIOTOMY.

By J. MARION SIMS, M.D.,

NEW YORK.

Professor Lister's late visit to this country seems to have given a new impulse to antiseptic surgery. Van Buren has adopted it with success, and is lecturing on it to his class at Bellevue with great enthusiasm. Stephen Smith has also adopted it with the same success, and is teaching it most earnestly to his class at the University, and other surgeons must take is up. I have often wondered why it had not been used in ovariotomy. Lister told me it had not been done in Great Britain. He advocated it strongly, but Spencer Wells and Keith have had such wonderful success in their operations, that they did not feel justified in trying any new method.

I would have used it long ago if I could have found a convenient and ample spray-producer.

A fortnight ago I heard that Dr. Sass had perfected an apparatus, and had tested it in operations by Van Buren, Stephen Smith, and others. I saw Dr. Sass, and he kindly consented to bring his apparatus, and apply the carbolic spray for me in a case of ovariotomy.

The patient, forty-seven years of age, noticed a tumor the size of an orange in the right iliac region last April. She consulted her family physician, who pronounced it an ovarian tumor. In June she consulted Dr. Thomas, who wisely told her the time had not arrived for an operation. On the 20th July she went to Philadelphia to see Dr. Atlee, who gave her the same good advice. I saw her on the 20th September. I have never seen any one so anxious for an operation. I dissuaded her from it, advising her to return home, and wait at least till next spring. I told her the tumor did not weigh more than ten pounds, and that an operation was not justifiable till she vomited her food, and began to emaciate. I saw her a month later. She declared she had not the strength to make the journey home, and that she threw up every time she took food. I still refused to operate. She wrote to Dr. Atlee, and he replied on the 6th November: "I can scarcely think a tumor so small can affect your general health so seriously. But if your emaciation and debility are the result of the presence of the tumor, then by all means it should be

removed." I believe her vomiting and consequent emaciation were mainly the result of mental and moral causes. Whatever the cause, her declining strength and a recent fugitive attack of peritonitis warned me not to procrastinate the operation any longer.

The operation was done on Thursday, the 23d November last. I am particular in fixing the date, because I believe it inaugurates a new departure in ovariotomy.

Dr. Sass directed the spray, which covered the seat of operation with a delicate carbolic mist. The hands, sponges, and instruments were all dipped in carbolic water. The operation and dressing lasted forty minutes, the spray being kept up all the time. It could have been continued two hours, if necessary. There were no adhesions. The peritoneal cavity contained six or eight ounces of a reddish serum. The peritoneal membrane was everywhere deeply congested. This fact explains the presence of reddish serum, and the previous attack of peritonitis.

The pedicle was very short, and at least three inches broad. It was tied in three sections with strong twine, and drawn out and fixed in the lower angle of the wound, clamp-fashion.

The external incision was closed by sutures, and a carbolized dressing applied.

The pulse never rose above 90, nor the temperature over 101.

Convalescence was fully assured in forty-eight hours, and the patient is now quite well. The tumor was polycystic, on right side, and weighed fifteen pounds.

I hasten to lay this case before the profession merely to urge the adoption of Lister's antiseptic method in ovariotomy, which, I am sure, will prove as valuable in this operation as it has in general surgery.

Dr. Sass's apparatus answered its purpose admirably, and I think he has rendered us a great service in bringing it before the profession at this time.

OPIUM INEBRIETY.

By J. B. MATTISON, M.D.,

BROOKLYN, N. Y.

(Read before the Medical Society of the Co. of Kings.)

In accepting the invitation kindly tendered me to prepare a paper for presentation this evening, I have done so with the most appreciative sense of my inability to proffer more than an outline of a subject great and growing in its importance, and which demands of him who would do it full justice time in excess and talent in advance of that I have bestowed upon it.

The topic to which I am desirous of directing your attention, and which I trust I shall be able to invest with a larger share of interest than you have hitherto, perhaps, accorded it, is Opium Inebriety: its Pathology, Etiology, Prognosis, and Treatment.

I am well aware that, in so doing, I am instituting a new departure from the ordinary line of investigation concerning a most important factor in the weal of a common humanity; but if I can succeed in impressing upon you the fact that in opium we possess an agent potent for *evil* as well as good, and whose power in this regard has failed of receiving from our great body professional the attention it so deservedly demands, it may be that, in time to come, being forewarned you will be forearmed, and able to avert a danger which is far from fanciful, but has in it, when fully established, that which leads down to the darkness of moral and physical degradation or death.

An assertion that the consumption of opium in this country during the past quarter of a century has increased to an extent utterly unwarranted by its need as a therapeutic measure pure and simple, will, I presume, pass unchallenged. No one will deny that a marked change has occurred in the practice of medicine so far as the employment of this drug is concerned; but that, alone, is entirely inadequate to explain the inordinate demand at present existing.

Casting about for an explanation, we find there has been established among us a diseased condition, not, it is true, enumerated in our nosology, but which has, nevertheless, as asserted by high authority, "attained stupendous dimensions, lying ambushed beneath the foundations of health and happiness," and which presents, in many instances, a symptomatology as marked and specific as that of the better-known ills to which our flesh is heir.

After a time more or less prolonged, according to varying circumstances, an individual who has been employing opium, be the cause thereof what it may, finds himself the subject of sundry uncomfortable sensations for which he is unable satisfactorily to account; but in many cases ignorant as to their real nature, or supposing them to be some new manifestations of the disorder for which the drug was administered, no suspicion is aroused, its use continued, and this order of affairs repeated, eventually engenders a condition in which the demand for the stimulant is imperative, and the pitiable sufferer becomes the victim of an appetite that will not be denied; a craving that is, in almost the entirety of cases, absolutely irresistible.

Or, it may be, a patient well aware of the danger attending a protracted employment, fails of its full appreciation until some peculiar circumstance calls attention thereto, and then, if not too long delayed, a tremendous effort, costing distress of mind and body, may succeed in casting off the incubus; but in too many instances the power to will has become so prostrated that it is unable to reassert itself, and the hapless individual is given over to a servitude most deplorable.

Again, as more often happens, patients continue its use without the slightest idea of this danger supervening, being unaware of its ensnaring property and unwarned by their medical attendant; and when relieved, as they suppose, of a necessity for its continuance, and an attempt is made at abandonment, are horrified at finding it impossible so to do, and unless helping hands come to the rescue, almost invariably find themselves relapsing into their former condition.

Then, too, are those who, with an inordinate desire for stimulants of some sort, have recourse to opium for various reasons, as one demand or another for its use may be uppermost. The man of letters finds his eagerness in the pursuit of knowledge quickened and enhanced thereby. The orator discovers his flights of fancy and bursts of eloquence more easily attainable with than without it. Authors, under its influence, find themselves in possession of a larger storehouse from which to draw the material for their literary productions. The men and women of society discover the charm of their accomplishments, be the sphere of their adornments what it may, largely increased by its wonderful power; and the votaries of pleasure, exhausted by the round of their dissipating indulgence, resort to it to rekindle, in their well-nigh effete frames,

the fire that has burned so low and threatens to go out altogether.

Sooner or later, various functions become disordered. One of the earliest and most constant is an obstinate torpor of the intestinal tract, diarrhœa occasionally alternating; the appetite becomes impaired, and indigestion holds high carnival; the skin grows dry and harsh, and its natural color gives place to a tinge yellowish or bronzed; the eye loses its accustomed brilliancy and assumes a dull, lustreless look; flashes of heat and cold succeed each other; cramp-like pains rack the body; sleep vanishes, or is troubled, dreamful and altogether unsatisfying; the face becomes pinched and haggard; emaciation ensues; the strength declines, and the wretched unfortunate becomes, indeed, a mere physical wreck of his former self. Mentally, the condition is deplorable. Tossed about by conflicting emotions, preyed upon by distressing doubts and fears abiding, conscious of his thraldom and the impotency of his efforts at emancipation, the abject slave to this galling bondage goes through life surrounded by a darkness seemingly impenetrable and, at times, down "into the very depths of despondency and gloom." The strong becomes weak, the brave a coward, and all the nobler attributes of a vigorous manhood are swamped in the overwhelming rush of this imperious appetite.

Gentlemen, this is no fancy picture. I have seen a man whose courage would have carried him to the cannon's mouth, and whose eloquence has thrilled the councils of his State and the nation, so powerless in the grasp of this monster, that his helplessness was indeed pitiable to see. I have known a patient declare he would sooner endure for days the exquisite pain of a mortal neurotic lesion, than be enshrouded a few hours in the gloom that pressed itself down upon him as a result of his thraldom to opium. Those of you who have read the pages of Coleridge, will remember the graphic recital of suffering as a sequence of his slavery to this most tyrannical of masters. This, in fact, constitutes one of the most painful features connected with an enslavement to opium, and in many cases, doubtless, far transcends the mere physical distress. As has been well remarked, "but few know the terrors of those who are thus diseased. But few can comprehend the torment of a sensitive moral nature that by reason of its very sensitiveness has yielded to the bondage of appetite. But few apprehend the physical demand for composure and even oblivion that haunts a restless, nerve-worn nature, and many more should be willing to shield a brother's infirmity with the same covering of charity which they would themselves desire under a similar invincible pressure."

The description above given, applies of course only to cases where from peculiarity of constitution, hereditary or acquired, or from the extent and duration of the disease, the system has undergone a well-marked transformation. In the earlier stages the effects may be quite satisfactory, as has been observed by one who speaks whereof he knows: "The victim takes his first dose and feels exalted, serene, confident. His intellectual faculties are so adjusted that he needs but call, and they obey; discipline and order reign. His load of care, the tedium of life, his aches and pains, and 'the spurns that patient merit of the unworthy takes,' are all lifted from his shoulders . . . . The beams pour in, the clouds disperse, and all is bright as noon-day. But this calm is only that which precedes the storm. The nerves, that system of exquisite mechanism in man, have been interfered with and abused. There has been an unnatural strain; the harmony of tension has been disturbed and deranged; and now, instead of discipline and equanimity, cruel disorder and distraction rule the hour."

The time required for bringing about this latter result admits of wide variation. I have notes of an instance in which the inebriate plodded along nearly seven years seemingly contented, save in unimportant particulars, so long as there was no interference with his accustomed intoxicant. Recently I have been made acquainted with the case of a gentleman who has been an habituate for a still longer period; but owing to an originally strong constitution, it is only now that he feels impelled, from the encroachments the disease has begun to make upon him, to seek relief.

Individual instances vary largely regarding habitual consumption. The maximum daily quantity in cases under personal care was twenty grains of morphia subcutaneously; the minimum a fraction less than $\frac{1}{10}$ that amount. The extent of habituation, either as to time or quantity, affords no criterion of the effect produced, being sometimes strikingly disproportionate, and in the instances mentioned the results were much less disastrous in the larger consumer, and this too despite the fact that his addiction was more than triple in duration that of the other. The literature of this part of the subject presents some examples so extraordinary as to seem almost beyond belief; and among them the most notable in all respects, of which I have knowledge, occurred under the observation of Dr. John Van Bibber of Baltimore, and may be found in full in the Archives of Neurology for May, 1875. This gentleman reached a maximum of 60 to 80 grs. morphia, hypodermically, per diem, with the addition of from one to three pints of whiskey and eight or ten strong cigars. Under treatment he improved, but eventually succumbed to the triple pressure of his alcohol, opium, and tobacco. Opium inebriety presents itself in a twofold aspect, that of a vice and of a disease; and in cases primarily the former, it sooner or later eventuates in the latter. As a vice, those instances—a marked minority I think—in which the initial taking is a reprehensible desire for its stimulating properties, apart from any condition demanding its pain-relieving power—a mere wish for its pleasures, with or without the knowledge that its pains will prove to be greater than any delights it may furnish if its use be continued.

As a disease, those cases where its primal employment is legitimate, having the sanction of professional authority, and in which its use is persisted in until the morbid condition becomes thoroughly established. Just when the line of demarcation will be reached cannot with positiveness be predicted. Various modifying circumstances may exist in individual instances tending to prolong the time during which volition exerts a controlling power; but its reign is of necessity limited, and then opium inebriety as a vice is supplanted by opium inebriety as a disease. The shortest time which I have known required to establish this latter condition was three weeks, at the expiration of which, although the disease originally demanding it was subdued, the opium was not, and the gentleman remained an inebriate for many months, the final result being favorable.

Opium inebriety demands a congenial soil for its development. The nervous temperament furnishes a fertile field. We are essentially a people of this type, the most so, Dr. Beard asserts, on the globe. Neurotic diseases are rife among us, increasing rather than otherwise; and to their growing frequency and the consequent freedom, amounting at times, I feel bound to say, to recklessness with which the anodyne properties of this drug are invoked for the mitigation

of pain, is to be ascribed in most measure the alarming proportions to which this disease has attained among us.

The majority of individuals liable to become inebriates possess a constitution so in harmony with its seductive properties, that the exhibition of opium for more than a limited time exposes them to the risk of inebriety. Probably not a few among you are cognizant of those on whom it exercises this fascinating influence, and whose safety would be seriously imperilled by a somewhat prolonged administration. The limits of this paper preclude an analysis of this favoring diathesis, and it will suffice to say that the leading factor thereof is a strongly marked *hereditary* tendency to debility of the nervous system, either special or general, as evidenced by an ancestral mortuary record in which neurotic lesions present a prominent predominance. I do not wish to be understood as saying that the one is, of necessity, the corollary of the other; but I believe the exceptions not numerous; and if the proposition in the main be correct, the care demanded in determining the status of an individual from the stand-point of hereditary tendency prior to a protracted employment is too obvious to call for comment.

Touching thus superficially on some of the more salient points connected with this disease, we pass to consider the question of cause, which, in its practical relation to ourselves, as physicians, I take to be the most important part of the subject; for, if what is deemed the leading agent in its origin be correct, then opium inebriety becomes in large degree a disease preventable, and as such assuredly deserves our consideration.

Relegating to abler authority the great question of the etiology of inebriety in general, and restricting attention to this special type, What is the initial cause of its development? Do men take opium from choice merely for its pleasures; or is it that, once ordered on professional authority for some ill, fancied or real, and continued a time indefinite, the patient, never dreaming of the danger he is courting, finds himself, when therapeutic indications for its use have been fulfilled, a victim? Touching this, observation varies; though the preponderance of testimony favors the cause last mentioned. A recent writer holds to the opposite view, his language being: "In accordance with the best information I have been able to gather, the largest number of opium eaters contract the habit from choice, merely for its pleasures." Prominent among those well qualified to pass judgment on this question is Dr. Parrish, who reaches a directly contrary conclusion: "Men take it not for social enjoyment, but for a physical necessity." Another authority in this country remarks: "For the primary induction of the habit, the stated physician is so commonly responsible, that the *onus probandi* in exculpation rests upon him by all fair presumption." A late German writer says: "The original causes of this diseased condition, and of its extension, are the doctors themselves, who have accustomed patients to resort to the use of injections for the relief of painful affections of more or less short duration." Further corroborative evidence comes from another foreign source, in which the writer, after noting three cases of this disease coming under his care, all having their inception in an opiate prescription, remarks: "This leads me to say that I think there are many cases of chronic disease, or disease in which sleeplessness is a prominent symptom, in which opium is frequently prescribed without any thought of this danger supervening, and which has led me to believe and practice that it is advisable not to give opium continuously for any length of time in these cases, unless in painful and incurable diseases, as cancer, etc., especially if the patient is of a nervous temperament. There is no doubt that pain or sleeplessness would more frequently have to be endured, but other remedies might be substituted which would, in part, though not entirely, take its place. And, if we consider that it would save some, more perhaps than many are aware of, from contracting such a habit, I think that at least it would be advisable to consider this danger and bear it in mind when we are called upon to treat such cases and believe opium to be indicated; a danger which most readers well know, from their own experience, not to be a fanciful one." After referring to the strictures sometimes passed regarding the medicinal employment of alcoholic stimulants, he continues: "But it is otherwise with those whom I have mentioned, who have not known the potency of this drug, at least personally, until it was professionally administered, and who, in all likelihood, would not have known it unless so ordered. And this is generally the rule, I think, that the majority of habitual opium-eaters have, in the first instance, acquired the taste for it after having been ordered it by a medical man; and in view of this danger, I venture to say that this ought to be borne in mind when we administer opium in these cases, lest we might be the innocent cause of setting the spark to the fire that may only be extinguished with life." Speaking from personal observation, my testimony militates a statement as to the voluntary induction of this direful degradation.

If this be true, what is the great lesson to be learned on this most important subject? Simply this, that the necessity for caution in the prescribing of opiates rises to that of a *duty*, in view of the fact that much the larger number of victims to this baneful bondage become such through the unintentional ministrations of their medical attendants.

Respecting the prognosis of this affection, various circumstances may exist in individual cases affecting the probability of a successful termination. If the inebriety be the *only* disease, no complication existing, the prospect, of course, is heightened, though I am somewhat sceptical regarding the assertion of a recent writer, himself a ten years' sufferer, but finally relieved, that every case of opium inebriation not complicated by organic derangement, admits of cure. The extent of habituation as to *duration* is of greater import in determining the likeliness of a favorable eventuation than the mere daily quantum consumed. The longer the addiction the less favorable the prognosis, though to this there are, I believe, some striking exceptions. Much, too, depends on the patient's condition at the time restorative measures are adopted. If the general health be not very greatly impaired, and if, in addition, can be aroused an earnest purpose on the part of the sufferer to co-operate cordially with whatever mode of medication is adopted, an unyielding resolve to persevere in treatment, never doubting the issue, a strong point is gained and the prospect of recovery very greatly enhanced. Dr. Lewenstein says that scarcely twenty-five per cent. recover. Dr. Parrish remarks: "Of the cases miscellaneously presenting, one-third are curable if conducted under institutional régime." Dr. Day gives similar testimony. Dr. Calkins writes: "In a certain percentage, not yet defined, of cases curable, but under this primary and essential condition, that the patient is, for the time being, morally, if not physically, subject to the supervision and guidance of his physician." Dr. Van Deusen observes: "Our experience has satisfied us that a large share of the cases deemed as having got beyond the reach of

medical aid can be successfully conducted; but then on this one condition only, that the physician shall have the entire and exclusive control. As for efforts at reformation voluntarily undertaken and successfully carried through, the cases are so extremely exceptional as never to be counted on; but when a course of treatment has been submitted to and faithfully prosecuted to the end, the result is directly the other way." My personal experience in the management of this disease is entirely substantiative of this latter statement.

Regarding treatment, a wide diversity of opinion exists as to the propriety of a sudden or gradual withdrawal of the habitual intoxicant. There are those eminent in the fraternity who favor the former practice. And in one case under my care, a prominent surgical authority advised the man's incarceration, and the morphia shut off at once and forever. Sooner than submit, the patient declared to me he would have attempted self-destruction. Howe, in "Emergencies," asserts that "tapering off will not result in cure." This statement is a very mistaken one, as the successful experience of more than one practitioner can well attest. Dr. Lewenstein states: "This is best effected suddenly, rather than progressively, the economy supporting an energetic procedure of this kind more easily than one more gradually conducted." Dr. L.'s cases may have been such as to warrant him in this assertion; but as applying to opium intoxicants in general, I am doubtful.

In large inebriate asylums immediate abandonment is urged as being more active and prompt; but it must be remembered in this connection that these institutions are able to impose physical restraint, without which, in well-marked cases, it is well-nigh impossible to secure success if this plan, which may well be called heroic, be adopted. Advocates of this method argue that opium is a poison, and as such should be at once discarded, and that its votaries, so long as they are allowed to experience its exhilarating effects, clamor for its continuance. The logic of the first proposition is open to question; and as to the latter, it is a fact that, so far from actually craving the drug, opium habituates entertain a feeling distinctly the reverse. Instead of a longing, a loathing; a disgust, rather than a desire; for, be it remembered, the morbid appetite is the result of the diseased condition, and as such strictly involuntary—outside the will's domain. Absence of the accustomed supply gives rise to great mental and physical discomfort, almost invariably precipitating the patient into a renewal; but this proceeds not from any wish for its mere exhilaration, for, in many instances, this is lost altogether; but from the reason that the will is weak, and when the crucial time arrives gives way entirely; so that, to use the striking language of a sufferer, "the drug-damned victim resumes the hell-invented curse."

Opposed to this treatment is what may be termed the reductionary mode of management, which consists of an immediate diminution to the point of toleration, and thenceforward its decrease in quantity, more or less minute, according to the degree of suffering attending its withdrawal; meanwhile surrounding the patient by circumstances hygienically favorable, and employing such direct medication as will best tend to sustain and strengthen the shattered nervous system and make amends for the abstraction of the adventitious support. The leading advocate of this method in this country says: "Our experience in the treatment of opium cases has satisfied us that it is neither wise nor humane to deprive the sufferer of his usual allowance all at once, but rather to grant a certain indulgence. Our practice is, in the general, to curtail by two-thirds, and upon the remainder to make reductions by inconsiderable fractional differences." A similar plan is, I believe, pursued in the public institution under charge of members of this Society. It has, too, operated successfully among cases in private practice, and is, in my judgment, best adapted to a majority of instances of the disease.

The reasons advanced in its favor are, that by it is avoided the shock which would of necessity ensue on a peremptory setting aside of the entire supply. Again, patients presenting themselves for treatment are often so reduced in their general condition as to require restorative measures to recuperate to a point at which they will be better able to bear the pressure when the time of trial comes. Then, too, by this plan can sooner be secured the confidence of the patient—a factor of no trivial significance, since by assuring him that the treatment will be as painless as it can well be made, his courage, all too drooping, more likely can be revived, and he induced to lend his co-operation with whatever measures may be deemed advisable. And by thus securing the trust, an excellent foundation is laid for the moral part of the treatment, which must most certainly react with favor on the physical.

At first sight, an immediate reduction of one-half or two-thirds seems almost dangerously rapid; but the fact is, opium inebriates frequently become possessed of the idea that their supply must be increased, so that at length they are consuming a quantity entirely in excess of what is actually required, and a very decided decrease occasions but little inconvenience. I remember an instance in which the descent was made from five grains hypodermically, daily, to two-thirds of a grain, before any material discomfort was experienced.

In the front rank of therapeutical measures is to be placed what may be termed a stout diet—an abundance of richly nutritious food, of such character and variety as shall seem best adapted to repair the waste effected. As an admirable adjunct, cod-oil is commended. The signal advantages obtained in the treatment of other neuroses present the strongest arguments for its employment in the one under consideration. Of the strictly medicinal agents, various helpful resources are at command. Strong nerve tonics are demanded. Strychnia, preferably the sulphate subcutaneously, is valuable. Arsenic is a reborant of value. Its power as an efficient nerve-strengthener is indisputable. Ferruginous preparations, especially tincture of the chloride, generously given, are of service. Phosphorus, zinc, quinine, and the minor tonics may be employed as adjuvants. I believe electricity, from its well-known tonic and sedative properties, to be well adapted to the treatment of this disease.

The invigorating effects of cold-water baths, simple or salt, sponge or shower, followed by a liberal amount of friction, are serviceable. The value of alcoholic stimulants is a mooted question, by some condemned as worse than useless, by others esteemed. Regarding this point, individual peculiarities are to be respected. Important auxiliary aid may be secured by a judicious employment of exercise, especially pedestrian.

For the sorely-besetting alvine torpor, atropia is the remedy *par excellence*. Hypodermically administered, $\frac{1}{100}$ to $\frac{1}{60}$ gr. at bedtime, it has, in my experience, always secured relief. It possesses additional value in restraining the excessive cutaneous action resulting from the opium withdrawal, and is, besides, a stimulant of unquestioned power to the sympathetic nervous system, which bears in large measure the brunt of this disease.

Of the suffering ensuing when the tolerant point is

reached, that connected with a want of sleep stands prominent. The insomnia is at times so decided as to defy relief, save by a temporary resort to opium. Of hypnotics, my preference is for chloral, but it sometimes needs dispensing with a lavish hand. I have given thirty, forty, fifty, and sixty grs. consecutively, of a night, before the agrypnia subsided. Bromide of potassium is valuable, but it must be given freely—one to three drachms in the twenty four hours. A point of importance is to administer it during the day, that its effect may be cumulative at bedtime. The other bromides are of service. A combination is sometimes advantageous. Monobromide of camphor commends itself. The lesser soporifics—hashish, henbane, ether, lupulin, and valerian—have a value. The warm bath is sometimes effectual. I have seen sleep secured by the inhalation of a very small quantity of chloroform. When everything else fails, a full dose of the accustomed opiate is advisable.

The intense epigastric distress, the neuralgia-like aches and pains, and the almost insupportable sense of general discomfort, are rendered more endurable by the employment of warm baths, local or general, of simple water, or with vapor or air, as in the Roman or Turkish. They are unquestionably of great restorative value.

The resultant diarrhœa, unless excessive, demands no special attention. When required, warm-water enemas, with mercurials and mild astringents, are indicated. In the attention thus given the body proper, that directed to the mind is of thorough importance. In an affection in which the phenomena of perturbed mental action are so conspicuously prominent, the value of psychical treatment is at once apparent. With its details I need not detain you. Suffice to say they comprise such social surroundings and sustaining sympathy as will tend to reanimate the prostrate spirit, so that, with renewed physical strength and restored will power, life in its pristine integrity may be resumed.

Progress of Medical Science.

Entozoa of the Elephant.—Mr. T. Spencer Cobbold recently examined the viscera of an elephant who had died of an epidemic disease, and found that the entozoa in the stomach and intestines of the animal were a sufficient cause of death. The small intestines contained large quantities of strongyles, considered by Dr. Baird as new to science, and the colon was filled with thousands of amphistomes, or *mauri* as they are called by the natives. The excessive ecchymosis observed throughout the alimentary canal testified to the injurious action of both species of entozoa. Mr. C. says there are now four or five distinct species of entozoa infesting the elephant. The amphistomes under the microscope present a brilliant pink color, with tubercles projecting from the interior of their capacious ventral suckers.—*The Lancet*, Sept. 16, 1876.

Two New Instruments for Treatment of Strictures of the Urethra.—Dr. Giberson, of Brooklyn, calls the attention of the profession to a divulsing urethrotome and a bulbous urethrotome, designed by himself, which he thinks possesses several advantages over All the urethrotomes at present in use. The first is especially designed for the treatment of strictures of large calibre. It consists of a metallic tube nine inches long and eighteen millimetres in circumference, which presents a raised band or shoulder five-eighths of an inch from its extremity. This is split throughout one-third of its length, to permit the halves to be expanded laterally. Within it is a steel tube into which, at one end, an olive-shaped bulb can be screwed, whilst at the opposite end is a screw, turning which retracts the bulb and dilates the instrument. There is a deep slot in the bulb for the blade, the shaft of which passes through the inner tube. The blade can be exposed between the bulb and the shoulder, a distance of five-eighths of an inch. The instrument is supplied with two blades, and three bulbs of different sizes. Each bulb has a flexible copper tip, to enable the instrument to traverse the deep urethra, even to enter the bladder. The aim of the instrument is to avoid deep incisions, but by a process of combined stretching and nicking, to effect divulsion of strictures. In using it the bulb will first discover the stricture, and must be passed through, until the constricting band lies between it and the shoulder; a few turns of the screw will now expand the bars and put this band on the stretch, and the blade, which has hitherto lain concealed in the wedge, must then be retracted so as to traverse the part across which the band lies. Usually this first incision causes a sensible relief of tension, but it rarely severs the stricture completely. A few more turns of the screw will again make this tense, and then the blade must be pushed back to the bulb, again nicking and probably severing the band. If necessary, this procedure may be repeated again and again, until the stricture is completely divided. Several strictures may be divided at the same sitting, if desired. The breadth of the dilating bars renders them less liable to contuse the urethral walls, and the lateral dilatation by stretching the constricting band at right angles to the knife, renders the division easy. On this account it is not necessary to dilate the urethra as excessively as with Dr. Otis' instruments. The dilatation occurs only at the point of constriction. The operation is not very painful, and the hemorrhage is not great. A full-sized sound must be passed for a few days after the operation. One great advantage of this instrument is, that it fixes the stricture at the precise point where the blade projects. Finally it is simply constructed, strong, easily cleansed, and not expensive. Dr. Giberson has employed it with much satisfaction in a large number of cases.

His second instrument consists of a metallic tube, to one end of which is attached one of a series of grooved bulbs of various dimensions. Through the tube passes a steel rod, one end of which is a blade half an inch long, which is concealed until required. The instrument combines the merits of a bulbous bougie and a urethrotome. In using it, the bulb must first be passed through the stricture, and the knife pushed forwards and made to surmount the most prominent part of the bulb. The instrument is then drawn outwards and made to cut its way through the stricture. If a single incision be insufficient, a larger bulb may be substituted and the procedure repeated. If the stricture be very tight, or it be necessary to relieve sudden retention of urine, the bulb is replaced by a flexible, tunnelled tip, which is slipped over a whalebone guide previously introduced. A larger blade is then projected, and the stricture divided. Dr. Giberson believes, however, that stricture below 20 French, are more satisfactorily treated by gradual dilatation, when practicable.

Contraction of the Palmar Fascia.—Dr. O. W. Madelung, of Bonn, has, during the last few years, examined and observed the treatment of a number of cases of this affection in the Surgical Hospital in that

city. In several of the cases he obtained histories of previous injuries or inflammations of the palmar aspect of the hand, and thinks that these were the exciting causes of the subsequent contraction. In other cases, and especially those occurring in advanced age, the disappearance of the fat which fills every interstice in the palmar fascia during early and adult life, seemed to be at least a predisposing cause of the affection. By this disappearance of fat, parts of the tense connective tissue of the palm are left unprotected, and the constant pressure, especially opposite the heads of the metacarpal bones and the flexor tendons, leads to chronic inflammation, to a hyperplasia, and finally shrinking of the normal fibres and consequent permanent flexion of the fingers. The disease claims imperatively the help of the surgeon, both on account of its painfulness and of the inconvenience resulting from the deformity. The standard surgical hand-books mention several operations for its relief, but unfortunately none of them offer any guarantees of success, and they are, moreover, so often followed by obstinate inflammation and ulceration, that they are now generally discarded by surgeons of experience. Prof. Busch, of Bonn, however, has devised an operation that has produced several cures, and has never produced any injurious consequence. It consists in raising a triangular fold of skin, the base of which falls in the furrow separating the bent finger from the palm of the hand, and the apex is at the furthest point in the palm, at which diseased fibres of the connective tissue can be felt, when the finger is extended to the uttermost extent. The flap is dissected up from the apex, as much as possible of the subcutaneous tissue being taken with it, so as to freely expose the palmar fascia. The flexion of the finger will now yield a little, and small nicks must then be made in the fascia, wherever the tension reveals contracted fibres, until the finger can be completely extended. The edges of the wound are then loosely united by sutures and the hand kept in a sling without attempting to preserve the extension. When the wound has granulated entirely, slight extension may be begun by placing wood cylinders of various sizes in the hand, and later on the hand may be stretched on a posterior splint, and active and passive movements may be made while dressing the wound. If several fingers be affected, two fingers may be included in one flap, but it is well not to attempt more in one operation. Advanced age is no counterindication to the operation. It has never been followed by burrowing of pus, or inflammation of the sheaths of the tendons, or by tetanus. On one occasion part of the flap sloughed, probably from too early attempts at stretching. The operation relieves the tension and flexion completely, but does not prevent the occurrence of the malady in another situation. It is important not to begin movements, or to bind the hand on a splint, before the complete formation of granulations in the wound, as this would cause pain and swelling of the hand, and perhaps sloughing of the flap. In 1858, Busch called attention to the great elasticity of granulations, of which he has often taken advantage in the treatment of cicatrices from burns.

Treatment of this contraction by means of manual or mechanical extension without operation, has been tried time and again, but it seems to be utterly useless, and has only resulted in aggravating the pain. Several operations may be necessary to effect a cure. The operation will be greatly facilitated by the use of Esmarch's bloodless method, and the wound be made to heal more rapidly by the use of Lister's antiseptic dressing. When this dressing is used, even if the sheaths of the tendons be injured, which will unavoidably happen in some cases, the tendons may remain perfectly free and unimpeded in their motions.

Mode of Termination of the Tactile Nerves.—Up to the present time, as is known, our information concerning the terminations of the tactile nerves is limited to the knowledge that a portion of these nerves end in terminal corpuscles, particularly the tactile corpuscles of Meissner, and the terminal bulbs or corpuscles of Krause; it is admitted that the remainder terminate either freely or by closed networks.

Dr. Ditlevsen offers to show that the researches of latter years permit of views which are quite distinct and much more satisfactory from an anatomical as well as physiological point of view. With this object, he has reviewed all the researches which demonstrate the termination of the tactile nerves in terminal cells. These researches are the following: 1. The observation of Leydig that the nerves of the tactile hairs terminate by special cells, which are situated in the sheaths of the roots of the hairs, an observation whose truth was confirmed many years later by Sertoli. 2. The observation of Merkel on tactile corpuscles in the tongue and beak of birds. These corpuscles are, in reality, nothing but groups of terminal nervous cells. 3. The discovery by Leydig of similar tactile corpuscles in the skin of reptiles and amphibia 4. The fact that in man the corpuscles of Krause are also groups of terminal nervous cells (Longworth and Waldeyer). 5. The investigation by Longerhaus of amphixus lanceolatus. 6. That of Merkel of the skin of man, mammalia, and birds; and, 7. That of Ditlevsen of the skin of frogs. All these investigations show that the nerves of the skin terminate by special terminal cells. If we add the observations, according to which the tactile corpuscles of man and also the terminal corpuscles of birds, ordinarily called Pacini's corpuscles, are also probably groups of terminal cells, as well as other special observations, mentioned at length by our author, it becomes apparent that the principal characteristics of the mode of termination of the tactile nerves in man and the vertebrates are as follows: 1. The tactile nerves end in cells. 2. They are situated in the skin and the adjacent mucous tissues. 3. They are spread over the entire body; and 4. Are specially numerous in the active organs of touch. 5. The corpuscles of Meissner and Krause are nothing but aggregations of such cells. The result of a critical examination of the investigations thus far made on this subject shows that the reduction of gold chloride is particularly liable to lead to error. Hence the opinions now prevailing are regarded as extremely problematical.

Finally, special attention is paid to certain terminations of nerves, the nature of which as tactile nerves is still undetermined, namely: (1) the corpuscles of Pacini in man and the mammalia, which have been more particularly discussed by Axel Key and Retzius; (2) the organs of the sixth sense of Leydig. These organs are not, according to the author, organs of a special sensation, as Leydig maintains, but are in part terminations of gustatory nerves (the gustatory bulbs of man and the vertebrate animals), in part terminations of tactile nerves, as well as probably the organs discovered in the skin of reptiles by Leydig and Cartier. As to the lateral organs of fishes and tadpoles, it is still doubtful to which of the two abovementioned categories they belong, but it is certain that there is no probable reason for admitting them to be organs of a sixth sense.—*Nordiskt Medicinskt Arkiv*, 8dc. Bd., No. 11.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, December 9, 1876.

THE METRIC SYSTEM IN PRESCRIPTIONS.

THE recent action of the Medical Society of the County of New York, in recommending its members to employ the metric system in writing prescriptions, is likely to attract a good deal of attention, not only in this city, but throughout the country at large. The subject is one which merits the most serious consideration of all who are familiar with its bearings. The proposition to alter a long-established custom is defensible only upon the ground that the substitution is demanded upon the score of necessity, or upon the plea that the merits of the innovation overbalance the demerits, and more than make up for the inconvenience connected with its introduction. Two subsidiary questions likewise demand discussion, namely: Are we ready for the change, and is there a fair prospect of its general adoption? These points appear to us to be the principal ones to which attention should at present be directed, and it is to the consideration of these that we would invite our readers. First, is there any necessity for a change? In other words, is the present system of prescribing in every respect satisfactory, and are our prescriptions dispensed by apothecaries in a proper manner? In ordinary prescribing we employ several different units, to wit, the grain, scruple, drachm, and ounce as measures of weight, and the fluiddrachm fluidounce, and pint as measures of capacity. In England they likewise employ corresponding measures of weight, and also measures of capacity bearing the same names as those in use with us, as the fluiddrachm, fluidounce, pint, etc., but the names do not mean the same. The fluidounce of England is a volume which will be occupied by 437.5 grains of water, twenty of which volumes constitute the pint, while the fluidounce of this country weighs 455.6 grains, and 16 ounces make a pint. This difference is a source of inconvenience to us in two ways: firstly, in reading English books we cannot effect the reduction from their standard to our own (in cases where we wish to be exact), without considerable trouble; while a second and much more serious inconvenience, however, arises from the fact that English made graduates are said to be imported, and employed by pharmacists in this city and elsewhere. In consequence of this the physician who orders a f. ℥i. of any preparation never knows whether the patient will receive the amount that he desires, or whether a less amount will be dispensed to him. This uncertainty, due to the fact that measures of the same name do not possess equal values, is certainly an evil which demands correction in some way. There is, however, still another difficulty in the use of the *ounce*. In the majority of prescriptions calling for fluid preparations the letter *f* is not placed before ℥ symbol. In these cases it is the druggist's duty to supply a Troy ounce, or 480 grains of the preparation demanded. Now what is the custom in this regard? If the prescription goes to an American pharmacy, the probabilities are that the fluidounce (either American or English as may happen) will be employed; on the other hand, if it goes to a German druggist, the probabilities are equally great that the Troy ounce will be used. One prominent pharmacist informed us that it was his custom to use the fluidounce in dispensing prescriptions written by American physicians, and the Troy ounce in dispensing those which came from Germans. We see, then, that when ℥i. of a given solution of morphine is ordered, there is a good deal of uncertainty as to the amount that will actually be dispensed. Another inconvenience connected with the use of graduates is due to the fact that it is extremely difficult to measure with them accurately, even where a reasonable degree of care is exercised; and yet how many of us have watched the nimble fingers of the apothecary pour a tincture into a graduate, and then, after a hasty glance, that would do credit to a pigeon-shooter, pour it into the dispensing bottle, and leave behind a half drachm or so, remaining in the graduate. An experienced apothecary states that "errors of half an ounce or more to the pint are of frequent occurrence," * due to this species of carelessness.

Fully appreciating the errors likely to arise from this cause, the last National Convention for revising the Pharmacopœia directed its Committee of Revision to discard all measures of capacity, and to employ only measures of *weight* in the formulation of officinal preparations. These directions of the Convention, however, were not complied with, and the committee offer as an excuse that compliance therewith would have cost them (the committee) "too much time and trouble." (*Vide* Preface to the Pharmacopœia of the U. S., 1873.)

Thus far we have conceded the accuracy of the graduates themselves. If any one, however, will con-

* We avail ourselves here and later of some of the documents which were presented to the *Comitia Minora* of the County Society.

sider the low price ($3 a dozen), at which ounce graduates can be purchased, he will, we think, come to the conclusion that very little time or trouble has been spent upon their correct adjustment. We once personally had an opportunity of observing the process of graduating and engraving these glasses, and have often wondered whether our own prescriptions were dispensed from them. In many cases, it is true, the inaccuracy of the graduate will be balanced by the inaccuracy of the apothecary, but in other cases this error will be increased.

In our next we will consider the character of the Troy weights in use among us, as bearing upon the general discussion.

ALBANY ETHICS.

Until it is definitely settled that the professors of medical colleges have greater privileges of violating the Code than are accorded to ordinary members of the profession, we shall protest against the shameful system of medical advertising which shields itself behind college announcements in the secular papers. Why any body of men, because they may constitute themselves a faculty of a medical college, have a right to parade their professorships, ostensibly for the good of the institution, but in reality for the good of themselves, we can never quite understand.

As we had a right to expect better things of the Faculty of the Albany Medical College, we are the more surprised to find it stooping to the special method of advertising to which we have referred. We are well aware that any charge of using unfair means to advance the school, and through the school to advance themselves, will be met by the interested parties with innocent astonishment; but this will hardly receive its wished-for interpretation by the profession at large.

There is in reality no middle ground to take in this matter. Either the Code has to be altered to suit the supposed requirements of the college, or the college made to conform with the requirements of the Code. The deliberation which has apparently dictated the policy of the school in the advertising affair, only adds to the gravity of the offence, and the sooner the faculty is subjected to discipline the better. It matters not who the members of the said faculty may be; the higher their position, the more effectual will be the example which may be made of them.

Transactions of the International Medical Congress.—Subscriptions for the forthcoming volume of Transactions of the International Medical Congress are now being received. As but a limited edition will be printed, gentlemen who desire to obtain copies are requested to forward their names, with the amount of subscription ($6 per copy, in advance), to the Treasurer, Dr. Casper Wister, 1303 Arch Street, Philadelphia, before January 15, 1877. The price of the volume will be raised upon the day of publication.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Nov. 8, 1876.

Dr. Charles K. Briddon, President, in the Chair.

BUTTON REMOVED FROM THE NOSE.

Dr. Louis H. Sayre exhibited a button which had been removed from the nose of a child by means of the forceps devised by Mr. Durham, of Guy's Hospital. Several physicians had expressed their opinion that the foreign body had already escaped, but Dr. Sayre introduced the forceps, and felt the blades strike against something which gave a sensation different from the tissues in that locality, gently separated the blades, grasped the body, which proved to be the button, and drew it out. The case illustrated the use of the forceps for removing foreign bodies through small openings without previous dilatation.

Dr. Sell referred to a case in which several unsuccessful attempts had been made to remove a like body from the nose of a small child, and hoped that the instrument exhibited would afford the surgeon a means for obtaining a more uniform success.

Dr. Briddon thought that the blades of the instrument exhibited were too large to admit of easy introduction into the middle meatus, and that the forceps commonly employed for tearing away polypi of the nose would prove more uniformly serviceable. In cases in which no instrument like a pair of forceps could be introduced, the foreign body might be pushed back into the pharynx.

Dr. A. H. Smith referred to a case in which a button had remained in the nose for four or five months. Several unsuccessful attempts had been made to remove it, but Dr. Smith succeeded by introducing a hooked probe, and catching it into the eye of the button.

Dr. Briddon believed that the hooked probe would more frequently succeed than the forceps.

MAMMARY TUMOR.

Dr. Sands presented a mammary tumor removed that day from a mulatto woman at Roosevelt Hospital. The patient was thirty-eight years of age, and had never borne children. Except for the disease of the breast, she was healthy. Three years ago she first perceived simply a hard swelling, as she stated, upon the inner side of the left nipple, but not involving it. This gave her some uneasiness, but it did not commence to grow rapidly until six months ago. Six weeks ago the enlargement became much more rapid, so that at the time she presented herself, a few days before the operation, the swelling was probably five times as large as it was six months previous. The patient was sent for operation by Dr. Rankin, of Newport. The appearance of the swelling of the breast was singular. The organ was considerably enlarged, but unequally so in the vertical and transverse directions. The vertical measurement was a little more than six inches, while the transverse reached nearly twelve inches. The tumor was movable upon the pectoral muscle; was free from heat, pain, or tenderness; was pretty firm upon the external aspect of the breast, but to the inner side of the nipple was a hemispherical protuberance as large as half of a good-sized apple, in which there could be readily detected a distinct sense of fluctuation. The

areolar of the breast seemed healthy; the nipple appeared normal and was not retracted. The general appearance of the breast was something like that presented when chronic abscess is present behind the gland, and at first Dr. Sands was not certain but that it might prove to be such a condition. The history of the case, however, and the duration of the disease, enabled him to exclude such a conjecture. In order to decide as to the presence and the character of the fluid, if present, a hypodermic needle was inserted at the point where the fluctuation was most distinct, and a syringeful of clear, somewhat reddish liquid was drawn out, which upon examination by the heat test was found to contain albumen in large quantity; the specimen becoming nearly solid. The fluid was quite free from viscidity, and upon microscopical examination nothing was detected except blood-globules, and some corpuscles, the nature of which was not determined. Dr. Sands was at a loss with regard to positive diagnosis. Cancer seemed to be fairly excluded. There was neither cachexia nor enlargement of the lymphatic glands. The skin seemed quite healthy, was not changed in appearance, and was not adherent to the tumor.

The diagnosis seemed to be between adenoma, with the occurrence of cyst due to dilatation of one of the ducts of the glands, and a sero-cyst. He was inclined to regard the case as one of the latter. On the day of the operation, to make diagnosis more certain, the tumor was tapped, as a preliminary measure, with a trocar, intending, if it should prove to be a sero-cyst, to withdraw its contents, and inject the cavity with a solution of iodine. After the escape of about four ounces of fluid, serous in appearance, it became evident that the cyst was only incidental, and was not the characteristic part of the disease, for after the removal of the fluid, there still remained a large swelling, almost as large as the original. It was decided to remove the breast by extirpation, and the object was accomplished without difficulty, although he was somewhat surprised to find, upon making the dissection, that the tumor had contracted some adhesion to the skin.

The specimen was presented because it exhibited a somewhat extraordinary appearance. Nearly the entire mass had undergone what appeared to be cheesy degeneration. There was a cyst at the right extremity of the tumor, and it did not seem to have any distinct boundary wall. Its contents seem to have been rather the effusion of bloody serum into the texture of the morbid growth than the product of secretion from a cyst-lining membrane, or a cyst wall. The opposite edge of the tumor displayed a tissue which looked very much like ordinary glandular tissue of the breast somewhat œdematous. Dr. Sands inclined to the opinion that upon microscopic examination the tumor would be found to be an adenoma of the cystic variety which had undergone this remarkable kind of degeneration, yet he was doubtful regarding its precise character. It was a tumor, however, which, prior to the time of possessing any accurate knowledge concerning such growths, would have been called encephaloid. But that term, at the present time, possessed no meaning when applied to such growths without a more minute examination.

The specimen was referred to the Committee on Microscopy.

Dr. Beverley Robinson presented two small portions removed from a growth in the larynx of a man, 31 years of age, who came under his observation three weeks ago at the Manhattan Throat Hospital. At the time the first examination was made with the laryngoscope, the nature of the growth was not decided. The man was also seen by Dr. A. H. Smith, who was also in doubt regarding the nature of the growth. Small portions had been removed, and appeared under the microscope to be of an epitheliomatous character. Since the patient had come under his care there had been considerable advance in the growth, and a certain amount of dysphagia and dyspnœa had been developed.

There were three interesting points in the case:

First. The age of the patient. As far as the doctor was aware, no case of epitheliomatous tumor in the larynx, occurring at the age of 31 years, had been reported.

Second. The question of enlarged lymphatic glands at the base of the jaw and about the neck was not sufficient to determine the nature of growths in the larynx, whatever they may be with regard to tumors in other parts of the body. In other cases enlargement of the lymphatic glands in the neighborhood of the growth had been regarded as characteristic evidence of malignancy.

Third. The appearance the tumor presented under the laryngoscope, and the date of its duration, being of only eighteen months' standing, would seem to indicate its malignant character. At the request of Dr. Robinson, the specimen was referred to the microscopical committee.

Dr. A. H. Smith inquired whether epitheliomatous growths were accompanied by secondary enlargement of the lymphatic glands.

Dr. Satterthwaite replied that such enlargement almost necessarily accompanied such growths in their advanced stages.

Dr. Smith asked if it was not a fact that epitheliomatous growths of the œsophagus were not accompanied by such lymphatic enlargements.

Dr. Satterthwaite was unable to answer with reference to the glands in the immediate region of the growth, but was certain that epitheliomas of the œsophagus were liable to be accompanied by distinctly cancerous growths in other parts of the body.

Dr. Sands recalled a case, reported to the Society some thirteen years ago, in which an undoubted cancerous growth of the epithelial variety was removed from the larynx and returned in the supra-renal capsule, kidney, and ureter on one side, as proved by autopsy made twenty-one months after the operation. There was no enlargement of lymphatic glands in the neighborhood of the larynx.

Dr. Erskine Mason referred to a specimen of cancer of the œsophagus which he had presented to the Society about two years ago, and in that instance the glands were involved, as well as some of the other organs.

Dr. Satterthwaite remarked that at the time the specimen was presented, the observation was made that a small focus might give rise to a very extensive cancerous degeneration of other glands and organs.

Dr. V. P. Gibney presented a specimen, accompanied by a written history.

Aneurism of the Arch of the Aorta with Eroded Portions of Sternum, Clavicle, and First Rib within the Sac—Death by Exhaustion.

Through the kindness of my friend M. T. Scott, a medical student from Lexington, Kentucky, I am enabled to present this comparatively rare specimen. The case occurred in the practice of Dr. Henry T. Skillman, of the same city, and from Mr. Scott, his pupil, I have learned the following history, which he gives me from memory:

A merchant, æt. 33 years, always enjoying good health prior to the summer of 1873, applied to Dr. Skillman for advice in May, 1875. A small tumor was found in the right supraclavicular space, near the middle line, about the size of a common walnut. A distinct pulsation could be perceived, but no marked bruit was appreciable. The patient complained of pain darting down the right arm, and represented this as paroxysmal in character, at times very severe. He was easily excited, and beyond an expression indicative of great anxiety nothing specially attracted attention. The tumor had appeared only a short time before this examination, though the pain in the right arm and a flushed face on the least exertion, had existed for two years.

A positive diagnosis was not made at the time, but the case was observed with much interest by several medical gentlemen. A month or so later a huskiness of voice, with a peculiar cough, served to render clear the diagnosis, the tumor meanwhile continuing in statu quo. No well-marked changes occurred until the last week in August of same year, when Dr. S. was called to see the patient, and found him seated in a large chair suffering from severe dyspnœa, while the tumor seemed the size of a large orange, hanging as it were over the suprasternal notch, and hiding from view the manubrium. Great emaciation, marked huskiness of voice, a cough attended with a difficult expectoration of a glairy mucus, and an alarming dysphagia, were prominent symptoms. The pulsations were visible on entering the room; the skin at one portion was a little discolored, but no other signs of impending rupture were discovered. The dysphagia increased, and finally on the 13th of September death by exhaustion ended his suffering.

Autopsy.—On removing the integument no opening could be found leading into the tumor. On opening the tumor, it was found filled with coagula, and, on inserting the fingers, *roughened pieces of bone* could be distinctly felt. On further investigation the sac was found expanded into two pouches, one springing from the ascending portion of the arch and spreading towards the right, while the other involved the transverse portion, and extended anteriorly and to the left. All of the manubrium—save the upper border, which was jagged—was found within the sac; while the external periosteal layer formed a portion of the lining membrane of the anterior wall. This made, consequently, a consecutive or diffused aneurism. A nearly vertical, irregular fracture of this bone was found. The sternal end of the left clavicle, as far as the junction of the inner with the middle third, with a cup-shaped erosion of the head, the articulation being unaffected, was likewise found within the sac. The inner surface of the sternal end of the first rib of the left side, covered with a thin layer of periosteum, lay within the sac, while the upper border served as a limit for the downward extension of the tumor. No erosion of the trachea was found. Heart and valves thereof found in a nearly normal condition. Lungs found œdematous, though not markedly so; the bronchial tubes containing a considerable quantity of muco-purulent material. No other organs were examined.

In a hasty reference to the literature at my command, I find only two reported cases of aneurism of the aorta where bone was found within the sac, although Dr. Janeway, in a recent conversation on the subject, informed me that one or two such specimens could be seen in the Bellevue Museum. I have not had time to look them up. The reported cases I shall refer to as briefly as possible. Dr. Dickson (Medical Observations and Inquiries, vol. iii., 1769, p. 57) reports a case wherein death occurred from the rupture of the aneurism externally. The first bone of the sternum was almost destroyed, a large portion of the first rib on the right side, the right clavicle was much eroded, while the left was much diseased. *Several small pieces of ragged bone* adhered to the inside of the teguments, and others were mixed among the clotted blood.

Dr. John H. Packard (*American Journal of the Medical Sciences*, July, 1858, p. 48) reports a case wherein the tumor projected through the sternum and opened externally. "Several pieces of roughened bone within its cavity, two of them evidently remnants of the sternum. . . . . bare and eroded." The end of right clavicle and the upper two ribs on same side in a similar condition projected through the walls of the sac. Dr. Packard gives a diagram which represents very clearly his theory of the mode in which the bones found their way into the cavity.

Cases where absorption of the bone takes place from pressure are very common, and many reports of such can be found in the text-books and journals.

PERI-HEPATITIS AND CIRRHOSIS—A QUESTION OF ETIOLOGY.

Dr. A. L. Loomis presented a liver taken from a lady thirty-four years of age, who came under his observation in November, 1874. At his first visit the patient stated that, as far as she knew, there was no hereditary tendency to disease in her case. She had always been healthy until two years before he saw her, when she moved from the western part of the State to West Farms, where she contracted intermittent fever, from which she suffered, having chills and fever every two or three weeks during the entire period which had elapsed up to the time of the Doctor's first visit. During that time she had been treated with quinine and arsenic, but without producing other than temporary relief. In March preceding she suddenly became jaundiced, and so deeply that she said the surface of the body looked like an orange. The jaundiced condition continued about two months, during which time she had distinct chills, fevers, and sweats. About the first of June she noticed that she was losing flesh and strength more rapidly than at any time before, and by the first of August she was unable to get out of bed without assistance. The jaundice had entirely disappeared about the first of June. About that time she also noticed, for the first time, that her abdomen was somewhat swollen. The swelling rapidly increased, and by the middle or last of August she was so large that it was troublesome for her to move about. She was then advised to visit Richfield Springs, and was carried there upon a mattress. Very soon after her arrival she began to improve; regained her appetite and gained in strength, and at the end of four weeks all the swelling of the abdomen had disappeared. It had been supposed that the abdominal cavity contained fluid. Her general health improved so much that she flattered herself that she was nearly well. About that time she took cold, had a coryza and some bronchitis, lost flesh and strength, the paroxysms of intermittent fever returned, the abdomen increased in size quite rapidly; and, having seen a large number of physicians and received their opinions with reference to her case, but obtained no permanent relief, she came to this city for aid, when Dr. Loomis saw her.

Her abdomen was very large, contained fluid, and presented the ordinary appearance of advanced ascites; she vomited almost all the food taken; paroxysms of fever occurred every three or four days distinctly intermittent in character; and it was advised that the fluid be at once removed from the abdominal cavity by tapping. The patient was tapped, and on exami-

nation immediately after the operation, disclosed the fact that the liver was very much diminished in size. The other organs of the body, as far as it was possible to reach them, were found to be in a healthy condition. The urine gave no evidence of renal affection. She was a lady who had never taken stimulants; had never suffered from any form of trouble about the liver, as far as she knew, until the occurrence of the jaundice. After the removal of the fluid she was placed upon tonic treatment, cod-liver oil, iron, etc.; improvement in her condition began; the stomach retained food; she gained in strength and flesh somewhat, but the fluid returned quite rapidly, so that by the middle of December it was thought tapping would again be necessitated. To the surprise of all, however, the abdomen began to diminish in size, and diminished very rapidly, so that by the middle of January the fluid had almost if not entirely disappeared, and the patient was apparently far on towards complete convalescence. Improvement continued so marked that Dr. Loomis discharged her as a regular patient. About the first of March she took cold again; had a coryza and bronchial catarrh; complained of some pain over the region of the liver; fluid again accumulated in the abdominal cavity; she lost flesh and strength, the paroxysms of intermittent fever returned, and about the first of May it became necessary to tap her a second time. The patient did not rally as well as after the first tapping, and by the first of July it became necessary to perform the operation the third time. At each tapping, from 27 to 34 pints of fluid were removed. It was clear each time, contained no floccules of lymph, and, as far as it was possible to determine, had all the characteristics of fluid found in the abdominal cavity in connection with cirrhosis of the liver. After the tapping in July, the patient improved somewhat, but by the middle of November the abdomen was larger than ever, and her general condition was worse, if possible, than it had been at any time during her entire sickness. She was again tapped, and the fluid did not return to much extent, if at all, and by the middle of December her strength and flesh had so increased that she was again discharged as a regular patient. She continued to improve, and the case was regarded as one in which a most remarkable cure had been effected. During all this time the treatment was tonic; at no time resorting to diuretics or hydragogue cathartics, or calomel, or large doses of quinine. About the first of May she was again seen, when she appeared well, and there had been no return of the swelling. About the first of June, Dr. Loomis was called to her on account of an attack of hematemesis. One attack was rapidly followed by others, and at the end of four or five days the patient died of exhaustion.

At autopsy, the liver was found to be much smaller than normal, and the capsule very much thickened. All through the substance were evidences of marked increase of connective tissue—the cut surface presenting the appearance of ordinary cirrhosis with degeneration of liver-tissue. The surface of the organ was smooth rather than lobulated, and apparently the greater change in the connective tissue was upon the surface, the secondary change being in its substance. The stomach, pancreas, and liver were quite firmly bound to each other by old adhesions, but there was no evidence of peritonitis at any other point over the surface of the peritoneum. The only evidence of peritonitis was that indicated by the connective-tissue increase over the liver itself.

If the fluid in the abdominal cavity was the result of peritoneal inflammation, the peritonitis was a localized one. Again, at no time did the fluid withdrawn contain any floccules of lymph or any inflammatory product, indicating that peritonitis was the cause of the appearance.

If the case was one of pure cirrhosis it was regarded as interesting: first, from its origin; and second, from its course; the patient making recoveries to apparent health, which were followed by a return of the dropsical accumulation. The return in each instance was preceded by an attack of coryza and bronchial catarrh, some pain over the liver, and then followed a rapid accumulation of fluid in the abdominal cavity. As the early history of the case was glanced at, it would seem that the first thing that attracted attention to the liver was an acute attack of jaundice, unaccompanied by any symptoms which would lead to the suspicion that it was caused by biliary calculus. It was a jaundice that would lead rather to a catarrh of the gall-ducts as a cause.

Might not the jaundice, then, have been produced by an obstruction in the bile-ducts, in consequence of simple catarrh occurring in a liver already hyperæmic as the result of chronic malaria, and might not an inflammatory process be established in connection with those changes? That being the case, might not the connective-tissue changes have been preceded by thickening and contraction of the covering of the organ, and a gradual extension of that change along the transverse fissure and portal canals until the organ became very thoroughly the seat of connective-tissue degeneration? To Dr. Loomis that seemed to be the only reasonable explanation. The case had been regarded as one of cancer, chronic peritonitis, ovarian tumor, etc., but after the first tapping he was satisfied that it was one of cirrhosis of the liver. When his diagnosis, however, had been made, there remained a doubt with regard to the cause, for the influence of alcohol could be positively excluded.

Dr. Mary Putnam-Jacobi believed that there was no question with regard to the cirrhosis being developed from the peri-hepatitis, for that was a very common cause; but she thought a link had been dropped in arriving at the conclusion that the catarrh of the bile-ducts and jaundice had been caused by the peri-hepatitis. It seemed to her that the catarrh should be explained in some other manner.

Dr. Loomis remarked that he had been misunderstood with reference to the catarrh of the bile-ducts being caused by the peri-hepatitis. Early in the history of the case there was pain over the region of the liver, and at the time of the occurrence of the jaundice the question arose with reference to the probable relation existing between peri-hepatitis, the occurrence of the malarial paroxysms, and the jaundice.

Dr. Loomis further referred to a point of interest in his case. A few years ago Dr. Murchison stated that waxy degeneration of the liver was of quite frequent occurrence in connection with chronic malarial poisoning. At the time the statement was made, Dr. L. had under observation a case of ascites, associated with chronic malarial poisoning, and he made the diagnosis, based upon the statement of Murchison that there was waxy degeneration of the liver with ascites as the result. The patient died, and at the autopsy no waxy degeneration whatever was found, but there was present just such a cirrhotic condition of the liver as seen in the specimen presented, but without any history of jaundice.

With regard to the jaundice in his present case, it had no necessary connection with the peri-hepatitis; but, occurring at the time of the first pain over the liver, and the pain over the liver occurring in con-

nection with paroxysms of intermittent fever, it would seem that there was a connection between the two causes which might in part explain the development of an inflammatory process throughout the substance of the organ.

Dr. A. H. Smith inquired whether the paroxysms of intermittent were controlled by quinine.

Dr. Loomis replied that they were not entirely controlled.

Dr. Beverley Robinson asked whether there was not ancient pleuritis in Dr. Loomis' case.

He had seen cases in which there had been present pleuritic trouble, a thickened condition of covering of the liver, accompanied with intermittent paroxysms of pain and fever. They had evidently been cases in which the pleurisy was the original disease, and peri-hepatitis had been developed secondarily. He regarded it as impossible to differentiate between peri-hepatitis and pleurisy upon the right side without resorting to puncture of the chest.

Dr. Loomis replied that there were no evidences of pleurisy in his case, and furthermore, that he regarded it as an easy matter to make a differential diagnosis between peri-hepatitis and pleurisy—and without puncture.

Dr. Putnam-Jacobi directed Dr. Loomis' attention to the fact that a calculus was present in the gall-bladder.

Dr. Loomis recognized its presence, and remarked that whether it had anything to do with the production of the jaundice was a question.

NEW YORK COUNTY MEDICAL SOCIETY.

Annual and Stated Meeting, November 27, 1876.

Annual Meeting.

Dr. H. B. Sands, President, in the Chair.

THE METRIC SYSTEM.

After the reading of resolutions upon the death of Dr. Thebaud and Dr. Hunt, the following resolution was reported from the Comitia Minora, and adopted by the Society:

Resolved, That the Medical Society of the County of New York recommends to its members the use of the Metric System in their prescriptions.

Dr. Sands, the retiring President, in accordance with custom and courtesy, addressed the Society over which he had had the honor to preside during the past two years, and referred especially to an important event which had occurred within that period of time. The event to which reference was made was the legislative enactment regarding the suppression of quackery. The Censors of the Society had taken action in the matter, and the result of their labors had been quite gratifying. It was not probable that quackery could be entirely abolished by any law. The true remedy was within and not outside of the profession. The significance of a medical diploma should be increased; a higher standard of excellence should be aimed at among ourselves, so that no doubt could be left in the public mind with regard to the superiority and skill of the regular practitioner. Medical men should heartily unite in perfecting themselves in their art, and in proportion as they carried out such resolutions, and approached the highest standard of excellence, would empiricism be expelled by the pure light of scientific truth.

The minutes were then read and approved, and the Society adjourned.

Stated Meeting.

Dr. John C. Peters, President, in the Chair.

Dr. Peters, in his inaugural remarks, recommended that steps be immediately taken with reference to the publication of the Transactions of the Society. The Society had been in existence seventy years, and during all that time the minutes had been kept correctly, and contained a large amount of material which was exceedingly interesting, and he hoped, in view of the fact that the Society now held more money than they were entitled to by law, the Transactions would be published within the year.

It was recommended by the Comitia Minora that certificates of membership be granted to the following gentlemen: Drs. J. L. Wilson, W. B. Hubbard, Gustav B. Sussdorf, J. C. Kendall, David Brekes, and S. S. Bogart.

Dr. Erskine Mason then reported

TWO CASES OF SUCCESSFUL AMPUTATION AT THE HIP-JOINT.

He gave a complete history of each case, and drew largely upon the writings of Dr. George A. Otis, of the U. S. Army, for the statistics and the literature of the subject. The following were some of the more important conclusions to which Dr. M. arrived. It was not the greater dexterity in the performance of this operation that had given the greater success in later years, but it was the more careful selection of cases, and a more careful use of all the appliances which surgeons now have placed at their command. Thoroughly skilled assistants were regarded essential to the best success.

It was desirable that as little blood as possible should be lost. In his cases an abdominal tourniquet was used, and Esmarch's bandage also, so that no more blood was shed than in some comparatively trivial operations. If called upon again to perform the operation he would use Lister's abdominal compressor. The compression of the abdominal aorta should not be prolonged beyond the time necessary to secure the anterior vessels. The posterior vessels could be controlled with sponges until secured with the ligature.

It was believed that rapidity in the performance of the operation did not lessen the shock. Subcutaneous injection of a drachm or a drachm and a half of brandy immediately after severance of the limb was recommended as a measure for modifying the shock and assisting the patient in rallying. The doctor was strongly inclined to the opinion that loss of blood was the leading element in the production of shock; hence should be most carefully guarded against.

The complete removal of the capsular ligament was recommended, for it was believed that, by so doing, the healing of the wound would be expedited, and the formation of sinuses more certainly prevented. The circular operation, or Alanson's, was performed, and Dr. Mason was quite strongly in its favor, because the stump could be more easily dressed than after the flap operation; it probably gave rise to a smaller suppurating surface; it gave the opportunity for modification by separating the bone just below the trochanters in cases in which it might be deemed necessary after the bone had been reached, and the vessels not being cut so obliquely across could be more easily secured. There were cases, probably, in which the flap operation would be better than the circular, and the surgeon should not be wedded to either. It was a curious fact, and one which had been placed upon record, that in successful cases of amputation at the hip-joint, there had followed a marked increase in th

weight of the patient. The second of Dr. Mason's patients had gained twenty-five pounds in weight since the operation, and the first had gained considerably. The general conclusion to which Dr. Mason arrived was, that the former mortality attending this operation could be diminished by employing all the resources which an enlightened science had placed at our command, and the prediction was made that it might not be far distant when the results of the operation would be as favorable as those of amputation at the upper portion of the thigh. The patients, a lady and a gentleman, were then presented, the lady having lost her left, and the gentleman his right lower extremity.

After the conclusion of Dr. Mason's paper,

Dr. A. B. Crosby read a memorial upon the lives and services of

FIVE MEDICAL MEN WHO PRACTISED THEIR PROFESSION ONE HUNDRED YEARS AGO.

Two were signers of the Declaration of Independence, namely—Josiah Bartlett and Matthew Thornton. Their field of labor, professionally, was chiefly in the State of New Hampshire.

It was noted that, as early as 1754, Dr. Bartlett treated what is known as diphtheria with great success by the use of antiseptics and free doses of Peruvian bark. The same disease prevailed in the same locality several years previous to the above date, was treated antiphlogistically in a heroic manner, and the mortality was exceedingly great. Dr. Bartlett died at the age of sixty-five, and Dr. Thornton reached the age of eighty-nine.

Joshua Brackett was born in 1733, and died in 1802. He turned his attention particularly to the practice of obstetrics.

Lyman Spaulding was born in 1775, and died in 1821. To Dr. Spaulding was due the credit of originating the plan for bringing into existence the American Pharmacopœia, and throughout its formation his name could everywhere be traced, for he was, *de facto*, its founder.

Nathan Smith was born in 1762, and died in 1829. He was the founder of the Medical Department of Dartmouth College; and, with great acceptance to the students, delivered all the lectures. In 1798 he burst forth from the prejudices so strongly held by the profession and the people, and used cold affusion in the treatment of typhus fever; gave his patients cold water to drink, plenty of fresh air, insisted upon perfect cleanliness, and granted a nourishing and moderately generous diet. He was among the very first to perform the operation of ovariotomy in this country, and performed it independent of any knowledge of McDowell, of Ky. He used leather ligatures, cutting the stump square across, secured the vessels as after any other amputation, and returned the whole to the abdominal cavity. His patient made a good recovery, although there were some omental adhesions which necessitated the use of additional ligatures, and there were also some adhesions to the abdominal walls. Manipulation for the reduction of dislocation at the hip-joint was also among his accomplishments.

Dr. Crosby closed with a glowing tribute to the memory of these five heroes in the medical profession.

Dr. O'Sullivan introduced a resolution relating to the publication of the Transactions of the Society, which was referred to the Comitia Minora.

On motion, the By-laws were suspended, and the second Monday evening in December designated as the time for holding the next Stated Meeting.

The Society then adjourned.

New Instruments.

STOMACH PUMP, ASPIRATOR, AND SYRINGE.

By B. A. WATSON, M.D.,

SURGEON TO JERSEY CITY CHARITY AND ST. FRANCIS HOSPITALS, JERSEY CITY, N. J.

Having recently, in my hospital practice, a patient requiring the daily use of the stomach-pump, I began the treatment with an instrument somewhat less complicated than a steam-engine. To use this pump successfully, it is necessary for the physician to spend considerable time in the study of its mechanism, and, finally, to demonstrate its action by the passage of fluids through it in either direction prior to introducing the tube into the stomach. These preliminaries having been properly attended to, the tube may be passed, and the physician, with the aid of an assistant, will probably succeed in introducing food into the stomach or removing its fluid contents when desirable.

These complications and high price of the instrument are probably the real reasons why so many physi-

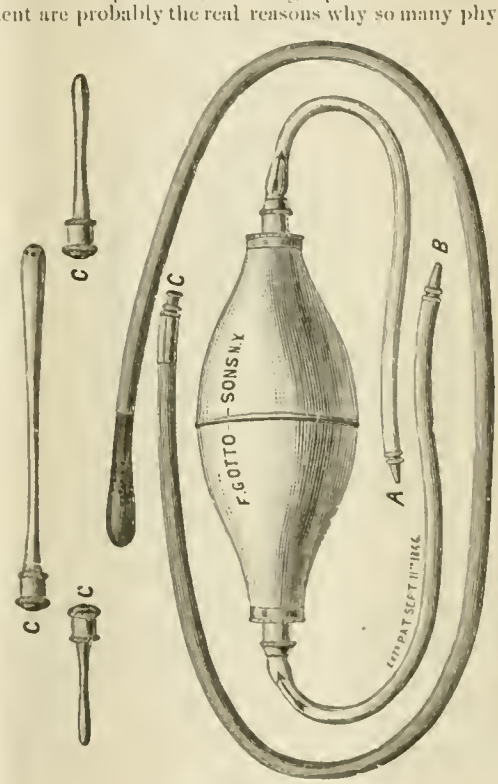


Fig. 1.

A, Cone; B, Cone; C, Sockets.

cians are found to depend upon the uncertain action of emetics whenever they wish to empty the stomach in case of poisoning. For the purpose of removing these objections so far as possible, I now offer an instrument which I have used with satisfaction, after an experience confirmatory of the views already expressed, and which I think may be acceptable to the profession.

The central part of this figure will be recognized immediately as the pump—modelled after Davidson's syringe—increased in size and power, and supplied

with hollow cones for the purpose of facilitating the making the connection. The direction of the current through the instrument is shown by printed arrows on the tubes, which are connected with the bulb of the pump. Surrounding the pump may be seen in this figure the English elastic stomach-tube provided with a metallic socket C, and the other end supplied with a piece of hard rubber, which is filled with fine perforations for the purpose of protecting the valves of the instrument. For the purpose of introducing fluids into the stomach, the cone A is introduced into the socket C, and the instrument worked in the usual way; and if it now be desired to reverse the current, it is only necessary for the physician using the instrument, while he holds the bulb in the left hand, to seize the cone B with the right hand, carry it to the socket, detach cone A, and insert the cone B. Thus the action may be rapidly reversed, and that too while it is filled with fluid, without even the loss of a single drop. The use of this pump as an ordinary syringe requires no explanation.

The following woodcut represents the Aspirator.

Fig. 2.
D, Cone; C, Sockets.

This is prepared for use by closing the tube with stop-cock, attaching the needle to cone D, connecting the cone B of the pump with the socket C of the Aspirator, and then exhausting the air in the bottle, after which the needle may be introduced, the stop-cock opened, and the working of the pump resumed for the purpose of continuing the vacuum.

These instruments are manufactured by Messrs. F. G. Otto & Sons, of New York.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from Nov. 25th to Dec. 2d, 1876.

McElderry, H., Asst. Surgeon. Relieved from duty at Fort Monroe, Va., and assigned to temporary duty with the troops at Washington Arsenal, D. C. S. O. 242, A. G. O., Nov. 24, 1876.

Lamb, C. A., Lieut.-Col. and Asst. Medical Purveyor. Died at the Soldiers' Home, near Washington, D. C., Dec. 2, 1876.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending December 2, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Nov. 25.....	1	13	50	3	4	55	1
Dec. 2.....	0	10	43	4	7	44	3

Dr. W. H. Geddings, of Aiken, S. C.—We learn with pleasure that Dr. W. H. Geddings, of Aiken, S. C., has entirely recovered from his recent severe illness, and has resumed the practice of his profession.

Scarlet Fever in a malignant form is very prevalent throughout the West.

Yellow Fever in Savannah.—The *Savannah News* publishes the following table showing the progress of yellow fever, and the mortality from August to November 26th:

	Total Deaths.	Yellow Fever.	Other Dis.	Whites.	Blacks.
August.....	172	33	139	91	81
September.....	783	556	227	575	208
October.....	474	287	187	301	173
November.....	145	64	81	91	54
Grand total.....	1,574	940	634	1,058	516

The N. Y. Medical Library and Journal Association has concluded to hold but two meetings in the month, instead of weekly ones as before. The times fixed are the first and third Friday evenings of each month, at 8.30 P.M.

Harvey Demonstrating the Circulation of the Blood.—The great scarcity of the original engraving of Harvey demonstrating the circulation of the blood to Charles the First of England, and published in 1851, by Lloyd Brothers, of London, has induced Mr. H. Wood, jr., of 826 Broadway, to issue a photograph of the same. The size of the latter is 7x9 inches, and is exceedingly well executed. By comparing it with an original engraving in our possession, we are satisfied that its sharpness of detail is everything which could be expected or desired under the circumstances. As the London engraving is now entirely out of print and not obtainable "for love or money," the photographic copy is likely to become a popular office picture.

Newspapers.—Correspondents sending us newspapers from different portions of the country will please mark the articles, or paragraphs, to which they wish to draw our attention.

Salicylic Acid.—Dr. Martineau reported at a recent meeting of the Société Thérapeutique, that neither in typhoid fever, nor in articular rheumatism, had he obtained any influences either by the temperature or the pulse, by the use of salicylic acid.

The Medical Classes at Philadelphia are said to be larger than those of last year.

Original Lectures.

LECTURES ON FEVERS.

By ALFRED L. LOOMIS, M.D.,

PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

(Phonographically reported for THE MEDICAL RECORD.)

LECTURE VI.

TYPHOID FEVER (CONTINUED).—TREATMENT.

GENTLEMEN:—Before speaking in detail of the treatment of typhoid fever, I will say a few words concerning its prevention.

If the modern theory (which I have already given you) of its etiology be accepted, the question naturally arises, cannot the typhoid poison be prevented from entering our dwellings, or polluting our drinking-water?

Facts prove almost conclusively that typhoid fever is never of spontaneous origin. Should it occur in the locality where you may reside, if possible find out its origin. If no case has ever before occurred in the locality, endeavor to ascertain the manner in which the typhoid poison has been introduced. If it is already endemic, limit the disease to the first few cases by a most thorough disinfection, and remove all those surroundings which favor the reproduction of the typhoid poison.

If the theory is correct, that typhoid fever is dependent upon a poison contained in the excrements of a typhoid patient, then the poison should be destroyed as soon as it is discharged from the body. For this purpose, the intestinal discharges should be received into a porcelain bed-pan (not a tin one), the bottom of which should be covered with a thin layer of powdered sulphate of iron; immediately after the discharge, crude muriatic acid, equal in quantity to one-third of the fæcal mass, should be poured over it. Never empty the discharges from a typhoid patient (no matter how thoroughly they may have been disinfected) into the privy or water-closet used by the family. Trenches should be dug for their reception, and new trenches should be opened every few days; the greatest care should be taken that these trenches are not so situated that drainage from them can contaminate wells or springs which furnish drinking-water. All under-clothing or bed-clothing that may have become soiled by the discharges from the bowels, should be immediately immersed in chlorine water, and thoroughly boiled within twenty-four hours. This procedure will certainly destroy the infective power of the typhoid poison contained in the intestinal discharges, and in the majority of instances you will prevent the spread of the fever.

Repeated observation shows that when one member of a family has typhoid fever, not unfrequently it is developed in every other member. This spread of the disease can be prevented, unless there is some local cause for its development which cannot be reached.

When its origin is not apparent, the wells, springs, and all the sources from whence water is derived for drinking and cooking purposes should be carefully and thoroughly inspected. Care must be taken that the waste-pipes from wells and springs do not pass directly into cesspools or sewers, and thus become a means for the conveyance of impure gases into the springs and wells.

The greatest care must also be exercised in regard to home drains and sewer-pipes, that they shall be free from leakage and obstruction, and that all water-closets, sinks, and other openings into them be provided with suitable traps.

When unpleasant odors are constantly present in dwellings, especially in sleeping apartments, disinfectants should be thoroughly employed, and the house be kept thoroughly ventilated.

When it may be necessary to open drains and cesspools in a dwelling for purposes of repair or cleansing, the same precautions should be exercised; these are especially of importance during the summer and autumn.

In conclusion, let me impress upon you this fact, that when typhoid fever is carried from the sick to the healthy, the evacuations are the chief, if not the only means of contamination; consequently, the importance of thoroughly disinfecting the excrements of typhoid patients should always be borne in mind.

In this connection the question naturally arises, can we not counteract or neutralize the effects of the fever poison after it has gained admission into the system, and thus prevent the development of typhoid fever? To accomplish this, at one time blood-letting was resorted to; but at the present day few practitioners would venture to suggest such a plan of treatment, and few patients could be found willing to submit to it. Emetics were given on the supposition that the fever poison acted primarily upon the mucous membrane of the stomach, and that the offending agent might be removed by their early administration, and thus its absorption into the system prevented. As it has been proved that the typhoid poison can be introduced into the system through other channels than the stomach, and as experience has shown that emetics have not the power to prevent the development of typhoid fever, their use has been abandoned. Diaphoretics have also been employed; but there is not the slightest proof that typhoid or any fever poison was ever removed from the system by sweating. A patient with some of the premonitory symptoms of fever may sweat, be relieved, and at once recover, but such a patient has not received the typhoid poison into his system, and was not, as is sometimes said, "threatened with typhoid fever."

Notwithstanding the bold affirmation of the author of the cold affusion plan of treatment, that if it were resorted to before the third day of the disease, it would invariably arrest its development, it has failed to stand the test of practical experience.

More recently, sulphate of quinine, administered in large doses, has been thought to have the power of arresting the development of typhoid fever in the same way that it arrests malarial fever, by its anti-periodic power; but there is no evidence that it has any such power, and as a prophylactic remedy it has been abandoned.

I might go on almost indefinitely enumerating measures which have been resorted to for preventing the development of this fever; but after the poison has once gained entrance into the system, no means have as yet been discovered by which it can be counteracted or neutralized so as to prevent the development of this disease. The duty of the physician, so far as he may be able, is to guide the disease to a favorable issue, and prevent injury to organs essential to life, keeping in mind that a certain definite period must elapse before this result can be accomplished.

Before entering into a detailed account of the treatment to be pursued in the management of a case of typhoid fever, I will say a few words in reference to the arrangement of the sick-room of fever patients.

Though often overlooked, this is a matter of no inconsiderable importance, not only as regards the comfort of the patient, but it has much to do with the successful issue of the case.

It is of the greatest importance that a properly qualified nurse be selected; one who has had experience in the care of fever patients is to be preferred. In the next place, the patient should be placed in a large and well-ventilated apartment. All furniture should be removed from the sick-room, except those articles which are necessary for the comfort of the patient and the convenience of the attendants. Remove the carpets from the floor, place your patient in a bed of moderate size in the centre of the room, and let there be free ventilation during both day and night.

The temperature of the apartment (if possible) should be kept below 60° F.

The bed and body linen of the patient should be changed daily, and at once be removed from the sick-room and placed in a weak solution of chloride of sodium; especially is this important if the patient is having frequent discharges from the bowels. The apartment should be kept perfectly quiet, the light subdued, and only the attendants should be allowed in the room.

These preliminary arrangements having been made, we will suppose we have in charge a patient with a mild type of typhoid fever. All medicinal interference in such a case is unnecessary. The treatment resolves itself into the arrangement of the sick-room and proper diet; milk is preferable, fruits are not to be allowed in any case. In the mildest case the care in diet is important, and the patient should be kept in bed until convalescence is fully established. This should be insisted upon, even in the mildest cases.

As I have already stated, the temperature in a mild type of this fever rarely rises above 103° F.; therefore there is no necessity for resorting to antipyretic measures; frequent sponging of the surface with cold or tepid water, as is most agreeable to the patient, will be found of service.

By far the larger number of cases of this fever are of a more severe type, and though in your treatment you must be guided by the circumstances of each individual case, usually you will be obliged to resort to more decided measures.

Remember that there are no specifics for this disease; all of those which have been proposed and employed have either fallen into disuse, or are resorted to only as aids in general treatment.

Typhoid fever is a disease that has certain stages to pass through, limited only by days and weeks. There is great doubt whether the physician can shorten its duration by a single day, but experience warrants the belief that many lives may be saved by remedial measures used at the proper time, and combined with judicious hygienic management.

There are critical periods in this disease; be prepared by knowledge and judgment to carry (if possible) your patient safely through them. Unquestionably one of the most important things to be accomplished is the reduction of temperature, or rather the keeping of the temperature below a certain standard. Blood-letting, emetics, diaphoretics, cathartics, chlorine water, and mineral acids have all been resorted to in order to reduce temperature. The last two agents were supposed to reduce temperature by neutralizing the typhoid poison. At the present day I think there is no intelligent physician who imagines he can neutralize the typhoid poison, and thus reduce temperature, while only a few years ago these agents were supposed to possess such power, and were very extensively employed for such a purpose by some very intelligent physicians.

The agents which more recently have been employed for this purpose, namely, sulphate of quinine and cold applications, are powerful agents in reducing the temperature and lessening the severity of the disease; but they can never shorten its duration, and if you employ them, expecting this result, you will be greatly disappointed. It is claimed by many very distinguished observers of the present day that the parenchymatous degenerations of the different organs and tissues of the body, which are found in those who die of typhoid fever, are due to the prolonged high temperature which is present during the course of this disease; but as yet there are no facts to prove this assertion, for the same parenchymatous changes are found in the bodies of those who have died of diseases, the course of which was not marked by high temperature, and did not extend over a period of more than forty-eight hours. So far as we are able by analogy to determine upon what these parenchymatous changes depend, we are led to believe that the specific poison of the disease has more to do with their development than the high rate of temperature. One thing must be apparent to every clinical observer: that the injurious effects of a prolonged high temperature are early and most markedly shown by disturbances of the cerebro-spinal system. It is still an unsettled question whether these disturbances are due to the primary changes in the constituents of the blood, which always accompany a high range of temperature, or to the direct effects of the high temperature on the nerve centres.

Whichever view we accept or adopt, the employment of those means which have the power of safely reducing temperature is indicated, and when judiciously used they have much to do with the safety of the patient.

All those means which have been employed for the reduction of temperature are included under the general term of *antipyretics*, and the treatment of disease by the use of these agents has received the name of *antipyretic treatment*.

Unquestionably the most efficient and reliable of the antipyretic agents are the external application of cold by means of baths, packs, and effusions, and the internal administration of the sulphate of quinine. The quinine is not administered to produce any specific action upon the typhoid fever poison, but is employed for its antipyretic power. There are other antipyretic agents besides these two, but they are of so little importance that it is necessary to give them only a passing notice after we shall have considered these two important ones.

At the present time, to a great extent, the opinion prevails that the application of cold to the surface is the great antipyretic in the treatment of fever. This is no new teaching. Long ago Dr. Currie recommended the application of cold to the surface of the body for the purpose of rapidly reducing temperature, and proved that it had such an effect; yet it was never very generally practised, and soon fell into disuse, as there was nothing reliable to guide one in its application. As we now have the thermometer to guide us in its application, more recently it has been resorted to with considerable success.

I will give you some general rules, which may be of service to you in the use of this antipyretic in the treatment of typhoid fever.

As soon as the axillary temperature in the evening rises above 103° F., place the patient in a water

bath having a temperature of 70° F. or 80° F., and gradually lower that temperature by the addition of cold water or ice, until the temperature of the patient begins to fall. You may be compelled to lower the temperature of the bath to 60° F. before the temperature of the patient is affected; but the lowering of the body temperature must be accomplished by the lowering of the temperature of the bath, taking care that the latter does not fall below 60° F. When the temperature begins to fall, renew your thermometrical observations every two or three minutes. If it falls rapidly—that is, two or three degrees in five or six minutes—as soon as the fall has reached 103° F., remove your patient from the bath; if it falls slowly, as soon as it reaches 101° F. he should be removed and immediately placed in bed. Never keep the patient in the bath until the temperature shall have reached the normal standard; should you do so, he may pass from a condition of fever into a state of collapse, as the temperature continues to fall for some time after his removal from the bath. While in the bath, cold should be applied to the head by means of a sponge wet in cold water or by an ice bag.

The cold pack is much less effective than the bath; but if the patient is too feeble to be moved, it may be employed with benefit. You should wrap the patient in a sheet wrung out of tepid water, and over this sheet apply one wrung out of cold water. The latter may be removed as often as it becomes warmed; its application and removal may be continued until the desired fall in temperature shall be obtained.

In severe cases, during the first and second weeks, you will find that after the temperature has been reduced by the application of cold to the surface, it will begin slowly to rise until it reaches its former height. Usually one to three hours will elapse before it begins to rise, and from two to six before it reaches its former height. You will then be obliged to repeat the baths or packs, and to continue their use, both day and night, from three to six times during the twenty-four hours, if you expect to keep the temperature below 103° F. and accomplish anything by this plan of treatment. My experience in the use of cold applications leads me to believe that unless you are able to maintain a low range of temperature after four or five baths, you gain very little by their continuance. In other words, if, after using the baths for twenty-four hours, the temperature of your patient rapidly rises to the same or a higher degree than it was before their use was commenced, you will obtain little or no benefit from their continuance unless you can introduce some other agent which shall maintain the low temperature reached by the bath. I am also convinced that after the second week of typhoid fever, cold baths should not be employed to reduce temperature, for by their continuous use after that period they may do great harm. The condition of a typhoid patient during the first and second week of the fever is very different from that during the third and fourth week. During this latter period there is great danger of collapse after a cold bath, and in several instances I am confident that pulmonary complications have been the result. In a few instances the temperature can be very rapidly lowered by the application of ice-bags to the abdomen. The rapidity with which the temperature can be reduced usually depends upon the severity of the fever. In some cases, when the patient is placed in the cold bath, the temperature will immediately begin to fall; in other cases there will be a gradual reduction of temperature as the water is made cooler. In certain severe cases, you may keep a patient in a bath of the temperature of 60° F. for the space of half an hour, without the temperature falling a degree. These cases are exceedingly grave in character, and you should use the bath with great care.

Finally, let me impress upon you that in typhoid fever, in order to reduce the temperature, you must not indiscriminately apply cold to the surface of the body. Perhaps there is no remedial agent which requires greater care in its use; yet doubtless, when judiciously employed, the lives of many typhoid patients may be saved, and it is equally certain that when injudiciously employed, many lives may be destroyed. If you use the cold baths in conjunction with other means for reducing temperature (concerning which I will speak at my next lecture), I am confident you will accomplish much; but if you rely only upon the baths, in the majority of instances you will be disappointed in the result. At the present time it seems to me, that by some, the benefit and power of cold baths in the treatment of typhoid fever have been overrated.

The general condition of your patient, and the stage of the fever must be considered; also the effects of the first few baths must be carefully noted.

Should a patient's temperature range at 104° F. or 105° F., there is no positive evidence that you must resort to a cold bath, or that a cold bath is the best agent to be employed for its reduction. Again, if the patient after the second or third bath is more quiet, has less delirium (if delirium previously existed), if his breathing becomes easy and natural, if the heart's action is more regular and forcible, and he falls asleep and perspires, there can be no question in regard to the beneficial effects of the bath. If, on the other hand, the bath is followed by feebler heart's action, by dusky cheeks, by rapid respiration, and by coldness of the extremities, from which condition the patient rallies slowly and imperfectly, you may be certain that, however high the temperature may range, you will do harm by continuing the baths. When the extremities are cold, or there is profuse hemorrhage from the bowels, or when, from any cause, there is great feebleness of the heart's action, and especially in the case of aged persons, cold baths are contraindicated.

Original Communications.

A CASE OF EXTENSIVE COMPOUND FRACTURE OF SKULL AND LOSS OF BRAIN-SUBSTANCE, WITH OTHER SEVERE INJURIES—RECOVERY.

By CHAS. E. SLOCUM, M.D.,

DEFIANCE, OHIO.

SEPTEMBER 22, 1875. I was sent for in great haste to visit a farm-house, four miles from Defiance, which had just been the scene of a terrific steam boiler explosion. On arriving at the place designated, I found three men dead, killed by the explosion, two with crushed heads, and the other with epigastrium and left side wholly torn open. Several were injured more or less severely. The steam-boiler, engine and appurtenances (being connected so as to be readily portable), weighing 4,500 lbs., were thrown by the explosion a distance of 130 feet, passing through a barn in their course.

The subject of this article, Orville Cassill, aged 15 years, while working in the barn, was struck by the flying boiler and carried with it a distance of 40 feet, where he was found on a pile of straw with the cu-

gine partly resting on him. He was with difficulty removed from under the great weight, and was found insensible and suffering extremely from the shock. His skull had suffered an extensive compound comminuted fracture, and considerable broken-down brain substance was oozing from the wound with very free hemorrhage, which was found to proceed from the lacerated middle meningeal artery. He was removed to the house covered with blankets, warm bricks placed to his feet and cold applications to his head. The shock continued so extreme that scarcely a hope was entertained of his rallying from it.

The heart's action and respiration were scarcely perceptible. There followed, however, a very slow improvement in his condition, and after a lapse of fifteen hours he swallowed some warm fluid placed in his mouth.

On the following morning, twenty-two hours after the accident, many of the symptoms of concussion and compression coexisted to a marked degree. The power of speech was abolished, special sensation destroyed. Respiration still feeble, imperfect and noiseless. Pulse weak, quickened, tremulous, and irregular. He had vomited slightly. There had been involuntary evacuations of fæces and urine. He would swallow small quantities of fluid if placed well back in his mouth. Voluntary muscles much weakened, but able to contract. Pupils widely dilated, nearly uniform, and sensitive to light. Eyelids firmly closed and immovable. Mind abolished.

With the assistance of Dr. L. G. Thacker, who administered chloroform, I proceeded to operate on his head. The fracture involved the right parietal bone in its posterior inferior edge and angle, and extended into the occipital bone. The edges of some of the fractured pieces (two of the largest measuring two and five-eighths inches in length, one, and one and a half inch wide respectively; smaller pieces were numerous) were turned inwards as on a hinge, and had destroyed the meninges to the extent of the fracture and pulpefied the brain substance to a depth equal to their width.

The broken brain flowed away freely before, during, and after the operation of enlarging the scalp wound, removing the pieces of loosened and depressed skull, and trimming the ragged edges. The hemorrhage was still considerable from the meningeal arteries. The chloroform was well borne, the pulse increasing somewhat in volume during its administration, and a quiet sleep followed its discontinuance. The scalp wound was approximated by numerous sutures of silver wire, the head shaved, and long strips of adhesive plaster applied and covered by bandages stitched to their place, leaving several apertures for the exit of broken-down brain-substance remaining and the pus that might form.

Pressure of the brain outward (hernia cerebri) was great and troublesome during the first and second weeks.

The frequent tearing out of the sutures with the very free suppuration, made frequent dressings necessary. The silver wire was repeatedly and freely employed until union took place.

The accident occurred Wednesday morning; Saturday night following he uttered the first sound as he was being moved. Sunday a muttering delirium commenced in which a word could occasionally be distinguished. This delirium increased during the week. After ten days a simple question would occasionally be answered intelligibly in monosyllable. During the third week the hemisphere gradually settled back to its normal position, followed by the scalp and a depression. His mind improved rapidly and his delirium ceased with the ending of the third week.

For over two weeks there was incontinence of urine and fæces, and for the same length of time his nurses thought him blind. His pupils were constantly widely dilated and nearly uniform. Their contraction to a natural size occupied a period of several months, and his improvement in sight—particularly his estimate of distance—was equally slow.

During his delirium, powders containing sulphate of morphia one-tenth grain, and bromide of potassium fifteen grains, were given whenever required. Usually one or two in twenty-four hours sufficed to keep him moderately quiet, and four was the highest number taken. A simple refrigerant drink, with an occasional small dose of sulphate of magnesia, constitute the list of medicines used until tonics were indicated.

Constant watching and frequent restraint were necessary to prevent violence to his head and other injuries.

In November necrosed bone was removed from the anterior part of the wound, and in December a small piece from the occipital bone, the former being a piece found depressed at the first operation and elevated into position, thinking to preserve it.

In December the last flow of brain-substance was noticed at the inferior part of the wound, it following the removal of a small fungous excrescence. The lowest point over the occipital bone was the last to close, frequently exuding a small quantity of pus until April, 1876, when it soundly healed.

This case I think may fairly be classed as one quite fully illustrative of the great amount of injury and consequent dangers that the human system is at times capable of withstanding.

This boy was severely bruised in the left leg and thigh, in the sacral and gluteal regions, in the left scapula, and in the whole extent of his left forearm. Two abscesses formed in his shoulder, and the continued injury given his forearm during his restless delirium produced suppuration and a complete fracture of what was at first an incomplete one of both bones. Necrosis and removal of bone followed. By persevering treatment he recovered with a straight, serviceable arm, with good motions.

During the summer just passed he has been assisting his father in errands and light work.

His mental faculties are a little slow in their action, and somewhat impaired. His parents state that he is much more petulant than he was before the injury. There is no complaint of pain.

The depression through the opening in the skull varies considerably in depth, at times measuring one inch, notwithstanding the increased thickness of the scalp. He cannot remain in a stooping posture. He is in good flesh and strong, but still moves a little sidewise and has not recovered his former steadiness of walk.

This case is also good evidence in favor of an opening through the scalp and skull sufficient in size to allow the full escape of broken brain, blood and pus in all perforating and contusing injuries of the cerebral mass.

The history of the case of Carruth, of New Jersey, and numerous others recorded of the same character, which terminated fatally after a few months, from leaving these irritants pent up to produce abscesses and compression, also bear testimony against the policy of non interference.

November 17, 1876.

THE BOGUS MEDICAL DIPLOMA traffic is quite brisk in France.

A CASE OF TETANUS SUCCESSFULLY TREATED BY CALABAR BEAN.

By FRANK S. GRANT, M.D.,

YONKERS, N. Y.

In an interesting communication from Lewis A. Stimson, M.D., on the "Treatment of Tetanus by Calabar Bean," which appeared in the last November number of the RECORD, the writer says: "As it is essential to the proper appreciation of the therapeutical value of the agent that the failures should be reported as well as the successes, I send you the following notes," etc.

Now, believing that many of the failures attending the administration of Calabar bean for tetanus have been due either to a poor preparation of the agent, or insufficient doses, or both combined, and having recalled to my mind, after reading Dr. Stimson's case, the successful treatment of a cure of tetanus by Calabar bean, I thought it might not be uninteresting to place it before the readers of the RECORD while yet the subject was fresh in their memories.

The following history is taken from notes, made while serving as house-surgeon to St. John's Hospital, Yonkers, N. Y.

Fritz Rannon, aged 21, single, native of Germany, admitted to hospital August 19, 1874. This man, while attending to a boiling vat of sugar, tripped and fell in up to his waist; he quickly got out, but was terribly burned by the boiling fluid. He was conveyed to the hospital soon after the accident. He improved slowly under appropriate treatment until September 12th, when the nurse reported that he had been very restless through the night, and sometimes excited.

September 13th. Restless, in a half sleeping condition, and with sudden fits of starting, as from a nightmare. It was also noticed he had occasional contractions of the platysma and facial muscles, with temporary fixation of the lower jaw. Later, he complained of sudden pains "shooting all through him." At night the muscles of the legs and abdomen underwent sudden and painful contractions. He was now, by order of the visiting surgeon, Dr. Pooley, given a prepared tincture of Calabar bean in ten drop doses, repeated every hour and gradually increased; also ordered beef-tea, wine, and milk frequently.

September 14th. Was delirious all night, the spasms have not increased; he now takes twenty-five drops of the tincture every hour.

September 15th. The tetanic spasms have not increased, but the patient's appearance is that of one worn out with fatigue and anxiety. The dose of the tincture was increased to thirty drops every hour, and the following prescription ordered:

℞. Chloral hydrat.,
Potass. bromid.....āā ʒi.
Aquæ ..... ʒiv.
M.
Sig.: A dessertspoonful every three hours.

September 16th. Has slept calmly nearly all day, and awoke towards night feeling much refreshed.

September 20th. Since the above date patient has improved slowly; tincture Calabar bean, in thirty drops, has been given three times a day, as symptoms of tetanus have subsided.

September 29th. While in the bath this morning patient was seized with a general spasm or opisthotonos, which lasted in bed fifteen minutes. A strong solution of Calabar bean was immediately made and administered as follows:

℞. Extract physostig ..... gr. xxxij.
Alcohol dil ..... ʒi.
M.
Sig.: Forty-five drops to be taken every two hours.

Towards the afternoon the spasms subsided in force and frequency.

October 1st. On the 30th, patient feeling very comfortable and no evidence of irritation, the dose of the bean was continued only three times a day. During this afternoon he was suddenly seized again with opisthotonos which lasted for nearly two hours. The dose was now increased to sixty gtts. every hour.

October 2d. Better; no return of spasms this morning; medicine continued in the same manner.

October 4th. Patient has been doing perfectly well; has lost the fatigued and anxious look; the dose of drug was reduced to thirty gtts. thrice daily. From this date until his convalescence the patient had no further return of tetanus. The drug was gradually given in smaller doses, and finally stopped altogether.

REMARKS.—There are a few chief features in the history of this case worth remarking upon. It will be observed that during the tetanic condition, whenever the drug was not pushed, the spasms returned with greater or less frequency, and that only when it was given in large and frequent doses (larger than in any case I have heard or read of) did its power become evident. The largest dose in Dr. Stimson's case did not exceed one and a half grains, and this when the symptoms were most severe; while in this case the maximum dose reached at one period four grains, and was continued for some time after the subsidence of marked spasms in three-grain doses.

No distinct physiological action of the agent was noticed during its administration, beyond contraction of the pupils and slight delirium at times.

The tincture which was first used, was prepared at the hospital by subjecting freshly crushed beans to the action of pure alcohol, and giving this as a saturated tincture; but the extract which was especially ordered came from the firm of W. H. Schieffelin & Co., New York.

107 WARBURTON AVE., YONKERS, N. Y.

A SUCCESSFUL CASE OF AMPUTATION OF THE THIGH TREATED ANTISEPTICALLY.

By LEWIS A. STIMSON, M.D.,

SURGEON TO PRESBYTERIAN HOSPITAL, NEW YORK

W——, 37 years old, was admitted to the Presbyterian Hospital 13th November, 1876, for a central osteo-sarcoma occupying the lower half of the left femur. Amputation was performed November 21st, as follows, Drs. Van Buren, Detmold, Keyes, and the resident staff of the hospital assisting: A medium-sized Lister's spray-producer, supplied with a five per cent. solution of carbolic acid, was so placed that its spray would fall directly upon the cut surface. The thigh was washed with a 2½ per cent. solution of carbolic acid, and the instruments placed in a basin filled with the same. The antero-posterior flap operation through the upper part of the middle third was performed, an Esmarch's band having been applied to the leg and a tourniquet to the femoral artery. The anterior flap, cut rather short on account of the proximity of the tumor, was made from without inwards, the posterior one by transfixion. The artery was found high up in the posterior flap, and a carbolized catgut ligature applied, both ends of which were

cut short. All other bleeding points, about fifteen in number, were secured in the same manner.

It had not been thought prudent to carry the elastic bandage over the tumor itself, and the flow of blood from the enlarged distal veins was therefore considerable; but the arterial supply was controlled so effectually by Dr. Van Buren, that little or no blood was lost from the upper side. The sciatic nerve was dissected out and cut off high up, so as to save it from becoming imbedded in the cicatrix in case primary union should not be obtained. A carbolized drainage tube, to provide for the ready escape of the first flow of serum, was placed across the bottom of the wound, and the edges of the latter then brought together with silk sutures prepared with carbolized beeswax (about 1 to 5). A strip of "protective" was laid along the wound, the end of the stump covered with a square piece of muslin dipped in the carbolic solution, and eight thicknesses of carbolized gauze prepared by Caswell and Hazard, but identical with that made in Edinburgh, placed over all and bound down with a roller bandage. A drachm of brandy was given hypodermically, and the patient placed in bed and surrounded with hot-water bottles.

The shock of the operation was considerable, and the temperature fell that evening below 97°; but the next day the patient had reacted finely, and since then he has eaten and slept better than for months previously, and has suffered no pain. Before the operation his general condition was bad, his appetite poor, his tongue red and glazed; his temperature rose from 1½ to 2½ degrees every afternoon, and the pain, especially at night, was very severe. The preparatory treatment consisted of careful nourishment and tonic doses of mercury, in accordance with the facts recently established by Dr. Keyes. During the first twelve days following the operation his temperature never rose above 99¾°; on the thirteenth day it rose to 100¼°, returning on the fifteenth to 98½°, an excursion due apparently to the appearance of a large carbuncle over the sacrum.

Two weeks after the operation, the entire wound had united by first intention, except at the outer angle, where the drainage tube had been maintained. No bare bone could be felt, and the sinus was not more than 1½ inches deep. All the sutures had been removed, and it is worthy of remark that, although some were left in place fourteen days, there was no suppuration about them. On the tenth day the patient was able to sit up, and on the fifteenth to walk with crutches.

The dressing was renewed the day after the operation and every second day thereafter for ten days, always under the spray, a frequency which was due to my desire to run no risks, and not to the amount of discharge, of which, if we except the first flow of serum, there has been scarcely half an ounce all told.

The tumor was presented to the Pathological Society November 22d, and a full description will be found in the report of the meeting in a future number of the MEDICAL RECORD.

I feel justified in calling attention to this case, because the rapidity of the recovery and the absence of all complications seem to have been due to the antiseptic treatment, and because, taken in connection with the good results obtained in two capital operations performed by Dr. Keyes (one of which was published in the RECORD, October 28th), and three minor amputations and one compound fracture of the tibia treated similarly by myself, it furnishes an additional reason why a method which has been cordially adopted and conscientiously practised in all its details for several years in England, France, and Germany, should no longer be a rarity in America.

The apparatus used on this occasion was loaned by Dr. Van Buren, who has been very active in calling the attention of the profession to the advantages of the method, especially as a means of settling some of the most important and perplexing nosocomial problems.

Progress of Medical Science.

LISTER'S SYSTEM AS USED AT FREIBURG.—Dr. A. W. C. Berns furnishes a summary of the results of the Lister treatment of wounds as obtained in the Freiburg clinique, under Prof. Czerny. In April, 1874, they adopted this treatment. In 1873, there were 901 cases treated, with forty-five deaths, of which nine were from pyæmia and three from erysipelas. In 1874, 910 cases and forty-two deaths, of which pyæmia claimed five and erysipelas three. In 1875, 864 cases and twenty-four deaths, three from pyæmia and one from erysipelas. Conservative surgical procedures have been notably benefited by the employment of this method. Dr. Berns concludes that, while the clinical material remained the same in quality, and other conditions were unchanged, the comparative mortality, and the incidental wound-diseases diminished, as a result of this mode of treatment, although, to be sure, the figures given are small.—*Archiv f. klin. Chirurg.*, XX. 1, 1876.

THE OPEN TREATMENT OF WOUNDS.—Dr. Burow, of Königsberg, reports the results of 123 operations performed by his father and himself during a period of nineteen years, and treated by the open method. The following are the figures given. There were 123 cases, with nine deaths, *i.e.*, 7⅓ per cent., comprising thirty-three amputations of the thigh with six deaths, or 18 per cent.; twenty-four amputations of the leg with three deaths, or 12 per cent.; and twenty-five amputations of the arm, twenty-nine of the forearm, nine of the foot, and two of the hand without any fatal case. These figures furnish a most interesting comparison with those compiled by Paul, Malgaigne, Ashhurst, and others, more especially Krönlein, Volkmann, and Thiersch. Dr. B. supports with sound arguments the character of his statistics, while acknowledging that the figures are small. He gives in brief the following as the essentials of the system he follows. In a case of amputation of the breast, he carefully checks the bleeding by the use of silk ligatures which he cuts off short. The wound is then left absolutely open, being protected from dust and flies by a simple oiled cloth. No sutures or plasters are used. When the first oiled cloth is loosened by suppuration, a second is applied dressed with a simple ointment. When granulations spring up luxuriantly, the cloth is wet with a solution of acetate of alumina. This is the whole treatment. After amputations of limbs, he first ligates the larger vessels before loosening the Esmarch's tube, completing the ligations after removing it. The wound is then left open for half an hour with the double object of guarding against secondary hemorrhage and of allowing the surface of the wound to ooze with a serous fluid. Then he puts in three sutures, securing them with a loop and not a knot, so as to allow for swelling of the tissues. Two or three strips of plaster are placed between the sutures, and the lower angle of the wound is left wide open for the free escape of discharges. Then by position of the limb and careful watching, it is made sure that the secretions can escape freely. He does a flap operation,

insists on the greatest cleanliness on all hands, and never uses sponges a second time.—*Archiv f. klin. Chirurg.*, XX. 1, 1876.

THE DIAGNOSIS OF DILATATION OF THE STOMACH.—Prof. W. Leube finds great uncertainty attending the diagnosis of certain diseases of the stomach, and turns his attention to data other than those associated with dyspepsia. In cases of dilatation of the stomach, the amount of matters vomited may be of diagnostic significance, if in excess of from five to eight pounds, the normal capacity of the organ. Neither visible peristaltic movements, nor audible splashing sounds when the body is shaken, are distinctive of dilatation of the stomach. Percussion aids him in the diagnosis of this condition, under favorable circumstances. There is dulness extending horizontally across from the arch of the ribs when the patient is erect, and this dulness is replaced by tympanitic resonance when he lies down. To determine whether this cavity is the stomach or a distended colon, Leube observes the percussion note, after the introduction of a considerable amount of fluid, either by swallowing or by using the stomach-tube, in which latter case it can be introduced and removed at pleasure. So after pouring in a litre of fluid, if the level of the fluid is not much higher than the navel there is dilatation of the stomach. The most convincing proof of dilatation, however, he finds in introducing a long bougie or tube into the stomach, and then judging of the degree of depression downward of the greater curvature by palpation through the abdominal wall.—*Deutsch. Archiv f. klin. Med.*, XV.; *Med-Chir. Rundschau*, 1876; *Allg. Med. Cent. Zeit.*, Oct. 28, 1876.

CHRONIC RHEUMATIC MYITIS.—Dr. Uno Helleday says that but little is known definitely with reference to the pathological anatomy of this disease.

As for the symptoms, pain occupies the first place, in the opinion of the patients and that of the greater part of the physicians. This symptom is uncertain and generally indefinite. At first its character varies considerably; it scarcely ever remains the same in different individuals, and changes in the same patient, even disappearing from time to time. It does not always correspond to the part which is in reality attacked; it may be entirely wanting, etc. It may also depend on numerous other diseases. It is not rare, however, that a true myitis gives rise to pain in parts which are quite distant from the seat of the disease. It is probable that there is then a compression, exerted by the smaller portions of the muscles on the nervous filaments, and the symptom exhibits itself at their peripherical ends.

The sensibility of the diseased point to pressure has no further value. It exists in several other diseases, and may be wanting in myitis.

The function of the diseased muscle is most frequently impaired, but one may be entirely mistaken concerning this during life. The impossibility of using the muscles freely may arise from other causes, and, on the other hand, the muscular groups, which seem to be paretic and are really so, sometimes present no traces of inflammation. The source of this is much further removed.

The external swelling of the affected muscles is most frequently minimal or nul. It is by palpation, carefully performed, that a diagnosis is made. It is not necessary that the volume of the diseased portion of the muscle should be augmented, although this happens often enough; the characteristic changes refer rather to the consistence, and, above all, to the muscular elasticity. This resembles that of the muscle in the condition of contraction, and the diseased points may attain an almost ligneous induration, although the author has never in reality found the diseased muscle contracted. The diseased foci—for the disease in question quite frequently presents itself under this form—are less easily displaced with regard to each other and the intermediate healthy parts. It is necessary to know, however, that the consistence is not always augmented; it may be found normal and even diminished, but the want of elasticity is constant. This is the pathognomonic sign, but to appreciate it a thorough knowledge and a careful examination are necessary.

The muscles are rarely affected in their totality. The seat of the disease is most frequently found near the attachments. Sometimes one feels numerous nodosities scattered through one or several muscles, the intermediate substance being healthy. The more advanced the anatomical changes are, the less the patients complain in general of the sensibility to the touch. The rheumatismal callosities are as a rule not painful.

The treatment should be directed by the rule that we must, first of all, endeavor to diminish the morbid production, by causing its absorption.

Massage is the best remedy, because it acts directly on the diseased points, and it has a more certain influence on the absorbent organs, than any other remedy, internal or external.

In recent cases its effect is often miraculous; but even in older cases of myitis, which have generally been previously treated by many other means without a durable advantage, it gives a good result, provided the cure has not been rendered impossible by the destruction of the muscular tissue. It is necessary to continue the treatment by massage, not only until the pains have ceased, and the patient has recovered the free use of his muscles and believes himself cured, but even to the time when he is really restored and the last trace of the disease has disappeared. In inveterate cases this requires much time. Eight cases are detailed, illustrating the difficulties of the diagnosis and the triumph of massage.—*Nordiskt Medicinskt Arkiv*, 8de. Bd., No. 8.

A NEW COLORING FLUID FOR HISTOLOGICAL USES.—Prof. Dreschfeld, of Manchester, recommends a watery solution of eosin in the proportion of 1 part to 1000 or 1500 of water, as possessing many advantages for coloring microscopic preparations. The thin section, either recent or hardened, requires to be placed in the fluid thus prepared, for not more than one minute or one minute and a half, and on removal is put for a few seconds in water weakly acidulated with acetic acid. The watery solution, so easily prepared and preserved, is one great advantage. A second one is the short time required for completely staining the tissues. In the third place, eosin renders the tissues clear and the histological details distinct. Fourthly, it differentiates the various tissues beautifully, a property which is very useful in examining the nervous tissues and compound tumors.—*Centralbl. f. d. Med. Wiss.*, Sept. 30, 1876.

EMPHYSEMA OF THE SKIN DURING PARTURITION. Dr. P. Alekschieff mentions, in the *Russisch Med. Rundschau*, Bd. 2, 1876, a rare complication of parturition which he observed at the obstetrical clinic of Moscow in a primipara, twenty-four years of age. During the application of forceps, rendered necessary by a contracted pelvis, a tumefaction of the skin of the neck was observed above the right clavicle, and this tumefaction increased largely during the uterine

contractions. There was observed an intumescence of the face, and especially of the palpebræ, the neck, and the upper portion of the thorax. This swelling constantly increased, and a manifest crepitation could be felt with the finger. Nothing particular could be perceived in the respiratory organs, except a certain weakness of the respiration of the right side. A live child was delivered with the forceps, and the emphysema disappeared in twelve days without any treatment. This case was due to the passage of air to the skin through lacerations of the pulmonary tissue, the result of intense muscular contractions.—*Lo Sperimentale*, August, 1876.

Poisoning by Œnanthe Crocata.—Dr. Foss relates nine cases of poisoning in children by this plant. The root was the portion eaten by the victims. It is said to have a sweet taste, which is soon followed by a sharp pungent sensation. The plant is called the five-fingered root, and is used very frequently in some parts as a dressing in severe cases of whitlow. The symptoms of the poisoning were similar in all the cases. Fifteen minutes after eating the root they all became unconscious, and had convulsions at intervals of half a minute between each. The pupils of the eye were widely dilated, the eyes were fixed and never moved, and the retinæ were insensible to light. There was no paralysis, reflex excitability, or any tendency to vomiting or purging. The pulse at the beginning of the attack in each was about 100, but for several hours before death was imperceptible. Post-mortem examination showed the left side of the heart to be filled with clotted blood, and the right side to be empty. Both lungs were congested, and upon section dark blood and frothy mucus oozed out. The blood-vessels of the membranes of the brain were congested with black blood, and so the substance of the cerebrum and cerebellum.—*The Practitioner*, October, 1876.

The Rôle of Granulation Tissue in Scrofula.—As early as 1865 Dr. Rubl had come to the conclusion that almost all scrofulous abscesses and ulcers were primarily due to the production of a tissue that closely resembled the granulation tissue, which Virchow had shown to be the foundation of syphilitic, lupous, and leprous growths. Continued observations of a very large number of cases have since then convinced him that almost all the diseased processes in scrofula depend on the production and development of granulation tissue. The characteristic peculiarity of this granulation tissue is that it contains all the forms of the elements of connective tissue, although the embryonic forms are most abundant. It consists mainly of lymphoid cells and of round or branched cells which resemble them, but are much larger; in addition to these there are numerous polynucleated cells, cells undergoing division, and cells in which endogenous cell-growth is taking place. The last are most frequently giant-cells, which are a constant and often a very large constituent of scrofulous granulation tissue. These are in part developed from lymphoid cells, but in part from connective-tissue corpuscles, endothelial cells, or bone cells, which have been excited to proliferation by an inflammatory irritation. Some of them by absorption of protoplasm, and others by union with other cells of the same sort, attain an immense size. When their development is completed, they break up into lymphoid or rather epithelioid cells, which also possess the faculty of proliferation. Besides these cells, the granulation tissue contains spindle cells in various stages of development, and elastic fibres which are partly the remains of the tissue that was replaced by the granulation tissue, and partly a new formation. In the latter case they often resemble embryonic fibres, and their connection with spindle cells can be easily demonstrated. Finally, blood-vessels which are partly of new formation may also be present. This granulation tissue consequently is distinguished from the normal tissue especially by the number of large cells, rich in protoplasm, which it contains. It consists of a collection of these brood-cells, simply lymphoid corpuscles, and young embryonic elements of different forms, which possess the characters of an inflammatory growth.

This granulation tissue may finally undergo a caseous metamorphosis, or it may be organized in the usual way and remain a permanent constituent of the body. In the former case, the product of degeneration may be semi-purulent, or thicker and pap-like, or may be firm and hard as a potato. Microscopically it then consists of bright granules, separate and in masses, of free nuclei, of pus cells, and of other cells of varying size and form, some of which have undergone amyloid degeneration, and some are still well preserved. Well preserved cells are found even in very old cheesy collections. This granulation tissue may start from the connective-tissue cells as well as from the lymph cells. Most frequently, in consequence of a local obstruction to the flow of lymph, some of its cells are placed in abnormal conditions of existence, and then take on the above-mentioned changes through proliferation. When some of these altered cells are carried to distant parts through the interstitial lymph canals, they may excite similar processes there. The phthisical process in the lung and other internal organs is in every respect the same as the scrofulous inflammation of external parts. The anatomical changes, the course, and even the mode of cure, are the same in both. Phthisis is one of the forms in which scrofula may and often does appear.—*Centralblatt für Med. Wissen.*, September 9th.

Cinchona Cultivation in India.—We learn from the recently published report of the progress and condition of India that the cultivation of the bark is very successful in most of the districts where it has been planted. In Sikkim there are now nearly three millions of trees in growth, a large proportion of which are the red variety, yielding a large quantity of alkaloid. The statement that "the inquiries of the Government quinologist have resulted in a cheap and efficient method of extracting the febrifugal alkaloids from cinchona bark" must interest all the manufacturers of quinine at home. In the Neilgherry Hills there are about 3,000 acres under cultivation, most of which are private plantations. The manufacture of amorphous quinine having ceased in August, 1875, all the bark is now dispatched to the London market for sale. In Bombay it has been decided, after a trial of ten years, to abandon the attempt to grow the plant on the Mahableshwar Hill, the climate being unsuitable. In Mysore there are two plantations, the bark being of a somewhat inferior quality, yet efficient in checking ordinary attacks of intermittent fever. In British Burmah the cultivation of the bark is carried on with success. The Indian Government, however, has decided not to manufacture quinine in this province.—*Lancet.*

Scarlatinal Dropsy.—Dr. S. D. Bell (Trans. Med. Soc. *Penn.*) claims great success in the treatment of this complication, by the use of a decoction of scoparius, prepared by boiling half an ounce of the tops in a pint and a half of water down to one pint. Dose, tablespoonful to wineglassful every four or six hours.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, December 16, 1876.

THE METRIC SYSTEM IN PRESCRIPTIONS.

In our last we considered the manner in which fluid preparations are dispensed by apothecaries, and will now invite attention to the Troy weights in use among them.

Referring to the price list of a prominent firm, we find that they offer for sale a set of weights, consisting of thirty-five pieces, for thirty-eight cents (rather cheap to be very good); and a set of grain weights, four pieces for ten cents. A set of these latter being tested gave the following results:

Nominal weight.	Actual weight.
¼ grain.	.35 grains.
½ "	.90 "
1 "	1.10 "
2 "	2. "

It will be seen that of these four, but one was correct, and that the others were respectively ten per cent., forty per cent., and eighty per cent. over weight. These weights were of German manufacture.

Another set (American make), consisting of thirteen pieces, and sold for twenty-five cents, were found to be reasonably accurate, the error in none exceeding two per cent.; but a set of grain weights (same make) comprising seven pieces for nine cents, was vitiated by the one-half grain piece, which was found to weigh .29 gr., or a little over a quarter of a grain. Our next researches were at the shop of an apothecary, who permitted us to test his weights, and among which we found the following:

Nominal weight.	Actual weight.
3 grains.	2.75
4 "	2.73
5 "	3.80
6 "	4.43
480 "	458.85

At another store eight or nine small weights were examined, with the following result:

Nominal weight.	Actual weight.
3 grains.	3.15
4 "	4.35
6 "	5.10

At this store we also found a small German saddle-scale, graduated from .1 gr. to 5 gr., in which the arm carrying the saddle was .2 gr. lighter than it should have been; consequently, if half a grain of morphine had been ordered, .3 gr. only would have been furnished, or if .3 gr. were ordered .1 gr. only would have been weighed. At a third store we found everything as it should be; but at a fourth, the proprietor declined to permit us to examine his weights. He said that he knew they were all right, because he had used them for several years. The two shops we first visited, and in which the defective weights were found, are situated in prominent thoroughfares, and enjoy first-class patronage. These few examples are of course not conclusive, but they permit a fair inference that a large proportion of the prescription weights used in this country are inaccurate, and many of them seriously so. We have made inquiry of several apothecaries as to whether their weights were regularly examined by the Inspector of Weights. The uniform reply has been, that their avoirdupois weights were inspected, but that their prescription weights were not. We see, then, that if we buy a pound of bird-seed, there is every prospect of our getting accurate weight, but with strychnine or atropine the case may be very different. We have been further assured by an apothecary that, in a prominent store in which he was once a clerk, there was not a balance in the establishment that would turn with less than three grains, and that it was the custom to *estimate* all smaller quantities. Another apothecary states that he knows of a store in which there are no Troy weights over half an ounce, all weighing above that amount being done with avoirdupois.

These facts, and those which we stated in our last concerning the indifferent use of the fluidounce and the Troy ounce, certainly lead us to believe that some change from present customs is desirable.

The practice of medicine necessarily presents so many uncertainties, that we should make an effort if possible to diminish them; and if we can secure uniformity in the dispensation of our medicines, we can thus eliminate at least one variable factor.

The abolition of *measures* of *capacity* in pharmacy, and the dispensation of all medicines (solid or fluid) by weight, is, we think, a step that will meet with acquiescence from all those who have given much thought to the matter. It is the practice in every country in continental Europe, and would now be the custom here if the committee who revised the Pharmacopœia had not been too lazy to perform the duties assigned them by the National Convention of 1870.

We should also make an effort to secure a reasonable degree of accuracy in all weights employed in

pharmacy; and we believe that we are not over-fastidious in demanding that the smaller weights shall not vary more than one per cent. from the standard, and that the larger ones shall vary still less. As it is perfectly practicable to detect a difference between weights of one-hundredth milligramme, that is, less than one-five-thousandth of a grain, we feel that we have a right to demand of the apothecary a decent approximation to the standard. The necessity of a change being conceded, in our own mind at least, brings us to the consideration of the question, as to whether it would be better to employ the metric, or whether we should make an effort to perfect our present system. The discussion of this point we leave until our next issue.

TYPHOID FEVER IN PARIS.

THE leading article in the last number of La France Médicale contains interesting points as to an epidemic of typhoid fever now raging in Paris. The Administration of Public Assistance has provided a special hospital, and the general hospitals have an unusual number of cases.

During the last three months the number of deaths has been more than double that of the preceding four years. According to the figures of M. E. Bernier, who is charged with the duty of reporting upon prevailing diseases, the number of typhoid-fever cases for the third quarter of these preceding years has been three hundred and sixty-three, of whom ninety-three died, making a mortality of twenty-five per cent. Now, for the corresponding quarter of the current year the records of hospitals give seven hundred and fourteen cases, which are double those of other years, and the mortality has been thirty-five per cent. instead of twenty-five. In the two preceding quarters the average of deaths was twenty per cent.

The fever exists permanently in Paris, and each autumn it undergoes a constant and considerable exacerbation, varying in degree, but regular in its return. This year it is coincident with unusual atmospheric conditions. M. Bernier has studied with zeal the course of the epidemic in the various arrondissements (wards) of Paris. He has found that the influence of population, that of altitude, poverty, or wealth, do not furnish data for conclusions. The epidemic is also remarkable in other features than its number. There is noted an especial severity of the early symptoms. The invasion is insidious and rapid. Several hospital physicians have noticed an absence of diarrhœa and epistaxis, and the early appearance of the eruption of spots. At the present time it assumes an adynamic form. A further point observed by M. Bernier is that there is a seemingly increased power of contagion.

The Assistance Publique has opened a temporary hospital. The mortality last week was one hundred and seventy-one, while the week previous it was fifty-nine.

MEDICAL PATENTS.

A CORRESPONDENT, commenting upon the account given by our Philadelphia correspondent concerning the wonderful exhibition of skill and ingenuity on the part of the instrument-makers at the late Centennial Exhibition, very pertinently asks, whence comes the "skill and ingenuity?"

Claiming, as he has a right to do, that in the vast majority of instances the medical profession deserve the credit for these inventions, he opens the question of medical patents by the following pertinent remarks:

"It may not be out of place to ask, What means will best secure a pecuniary return to medical men for their designs and inventions?" Scarcely a day elapses without a new design being furnished to an instrument-maker, for the making of which he takes good care to charge a round sum to the designer, and then he manufactures and sells the article at an immense profit to himself. Could not some arrangement be made with the trade, to allow the profession a *royalty* on all designs and inventions accepted, manufactured and sold, leaving to the former the sole right and privilege of *patenting* and selling? This plan would save the dignity of the profession, and though not so remunerative as the holding of a patent, it would nevertheless give a physician some pecuniary recompense for the outlay of his time and means, and for the labor of his brain."

CREMATION AS A SCIENCE.

DESPITE the recent effort to popularize cremation by the final disposal of a famous corpse, the public are as much, if not more inclined to old-fashioned burial than ever. In fact, as the result of the recent exhibition in Pennsylvania, cremation as a science has lost ground. The furnace, as exhibited on the occasion to which we refer, was a very complete one of its kind, and its construction was based upon strictly scientific principles—in fact, it accomplished everything anticipated. So far as the corpse was concerned, everything went off satisfactorily, but whether other corpses are likely to follow the example is a question. It is a pity, however, that such a perfect furnace should not be turned to some more useful purpose.

FIRES IN THEATRES.

THE recent terrible catastrophe at the Brooklyn Theatre has aroused public concern regarding the best means to be adopted to guard against the effects of fire in large and crowded buildings. It is of course useless to attempt to control any crowd when under the maniacal influences of a panic. The safety of the great majority composing it rests altogether upon prevention. Obviously the best assurances in this direction are the greatest possible facilities for rapid egress and the prevention of the spread of the flames from

one part of the building to the other. In regard to these points, very few, if any of the public buildings of this city are absolutely safe. In our theatres, with one or two exceptions, no extra provisions are made against the occurrence of a panic, and no extra precautions taken to arrest the progress of a fire among the scenery. In the case of the Brooklyn Theatre, all the necessary conditions were present beforehand to bring about the terrible results which have so recently shocked the community. Dreadful as is this experience, resulting from inefficient preparations, some good may yet come of it in the way of a demand from the authorities, and from the public, for security in the future. Of the numerous suggestions which have been made, those referring to the control of fire have not only a practical, but a scientific interest to the medical profession. It is well known that by the aid of chemistry, all fabrics, whether for costume or scenery, can be made absolutely uninflammable. Not long ago the English medical journals, in commenting upon the death of two actresses by fire, discussed the subject of non-inflammable dresses in all its bearings, and advised that gauze and similar fabrics used by ballet-girls should be soaked in solutions of alum, or in some of the silicate salts. This suggestion has been adopted in some of the London theatres with good results. Although this precaution in regard to the dresses of actresses would not have prevented the Brooklyn disaster, it would certainly have its good effect if the "flies" of the scenery had been made non-combustible.

The President of the Board of Health, Professor Chandler, has very properly, it seems to us, advised that the scenes be painted in water colors and coated with a solution of silicate of soda. These precautions, together with those suggested by others, in regard to the free supply of water-pipes among the scenes, an iron curtain to shut off the fire from the audience, and a trained fire brigade attached to each place of amusement, are all thoroughly practical, and we are in hopes that popular opinion will prepare the way for their ultimate adoption.

Walsh's Physicians' Combined Call Book and Tablet.—This visiting list is arranged in a most convenient form for the pocket, and, in this respect, we think that it is superior to any other which we have seen. It is bound in leather, is seven and three quarters of an inch long, four wide, but *three-eighths* thick, and is interleaved. It is so arranged without dates as to be good for any year, or any time in the year, and can consequently be used until filled. It enables the physician to write the name, address, and number of visits paid each patient (thirty-five per week) on one page and line, and by using additional pages, the list may be extended as desired. A convenient and novel feature is an *erasable tablet* bound on the inside of the front cover, upon which memoranda may be written. The publisher is Ralph Walsh, M.D., 227 Four-and-a-half street, Washington, D. C.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, November 8, 1876.

Dr. C. K. Bridion, President, in the Chair.

(Concluded from page 804.)

WATERMELON-SEED IN TRACHEA—TRACHEOTOMY.

Dr. Erskine Mason presented a watermelon-seed which he had removed by tracheotomy from a boy six years of age—a patient of Dr. Horton, of Morrisania. He was called to see the patient, Aug. 5th, and found that four days before, while eating watermelon, he had swallowed a seed that had passed into the trachea. He had suffered from cough since the occurrence of the accident, and on the night previous to the doctor's visit had had an attack of dyspnœa. When first seen, Aug. 5th, the boy's voice was husky, and the foreign body was readily detected in the trachea by auscultation when the patient coughed. The trachea was opened below the isthmus, and as soon as the opening was made, something flew out and struck the doctor upon the cheek. It was supposed to be the seed that had been swallowed, but upon the most diligent search no seed could be found. The patient, however, at once began to breathe more quietly. A tube was introduced, a pair of curved forceps passed through, but nothing was clutched. The tube was allowed to remain until two days after, the breathing being quiet, when it was removed. A slight amount of bronchitis was present. Aug. 14th, nine days after the operation, Dr. M. was sent for, and found that the boy had done well up to the previous night, when he had a terrible paroxysm of coughing like those which had previously occurred, and which lasted from 12 to 3 A.M. Dr. Horton informed Dr. M. that up to the morning of the 14th it could not be determined that any air entered the right lung, and yet there was no dulness upon percussion; nor was there any increased frequency of pulse or elevation of temperature. When Dr. M. saw him at 4 P.M., air was entering both lungs freely, and on coughing a foreign body could be detected in the trachea. The boy was placed under the influence of ether, and the original opening dilated by means of an instrument, and as soon as the dilatation was sufficiently complete, a violent paroxysm of coughing ensued, and the seed was expelled. The wound healed rapidly, and the following Sunday the boy went to Sunday-school.

The case was interesting in two particulars:

1. The seed remained in the boy's trachea thirteen days.

2. It illustrated how easily the surgeon might be deceived with regard to foreign bodies passing out after an opening into the trachea had been made.

CANCER OF THE STOMACH.

Dr. John C. Peters presented a cancer of the stomach, in which perforation of the coats of the organ would probably have been complete had it not been for an enlargement of the liver.

The patient was a man, 53 years of age, who lived somewhat well, and was perfectly healthy up to two years before his death, at which time he began to suffer from dyspeptic symptoms and more or less mental depression regarding the rapid approach of death. He was repeatedly examined; enlargement of the liver was detected, there was a fulness and a board-like

hardness across the epigastrium, but at no time was any tumor detected. Dr. Loomis saw the man, but was also unable to detect any tumor. The man never had vomiting, but complained of suffering extremely after the least imprudence in diet, and anything more than a small quantity of bland food was taken. His case had been regarded by one physician as one of neuralgia of the stomach, proceeding from malaria. Inasmuch as he had not had malarial manifestation, and no pain whatever except from imprudence in diet, Dr. Peters persisted in the opinion that there was present some organic disease of the stomach, probably of a cancerous character. All hereditary tendency to cancer was denied during life, but after death it was found that two or three of the members of his family had died of cancer of the stomach. The treatment was palliative, and the remedy which gave him most relief was hydrate of chloral. Administered in thirty grain doses at night and twenty-grain doses in the morning, the remedy kept him in a very comfortable condition. Shortly after taking the chloral one night he arose for some purpose, and, endeavoring to go about in a dark room, he fell and struck his head against a solid body, and died with all the symptoms of concussion of the brain.

The entire absence of vomiting and tumor throughout the duration of the disease were the interesting features of the case.

Dr. Loomis remarked that there was not present in Dr. Peters' case any of the so-called cancerous cachexia, and that neither primary nor secondary tumor of any kind could be detected. On palpation there was a feel as though there was a thickening of the tissues in the region of the stomach, and he was led to believe that the sensation was due to a thickened condition of the walls of the stomach, either malignant or non-malignant. In absence of all the ordinary symptoms and history of cancer of that organ, he was led to believe that some other condition was present.

Dr. Heitzmann remarked that he had made a microscopical examination of the specimen presented by Dr. Peters, and that he had found it to be cancerous in nature, and of the colloid variety. He further remarked that cancer of the stomach was not usually accompanied with secondary changes in other organs, but simply with swelling of the lymphatic glands, as was present in that case.

Dr. Sell presented a blighted ovum that had been cast off in the tenth week of pregnancy. It was thrown off, and the day subsequent was brought to the doctor at the Dispensary by the woman herself. She had had one living child, and had aborted three times. In the first two abortions she was sick with labor pains and progressive hemorrhage, and then the ovum was cast off. In the present instance, the ovum was discharged without pain or hemorrhage, and no discharge followed. The query was with reference to the cause of the abortion.

URETHRAL CALCULUS—DISCHARGE THROUGH AN OPENING IN URETHRA.

The President, in behalf of Dr. Stephen J. Clark, presented a urinary calculus one-quarter of an inch in its transverse, and one-third of an inch in its long diameter. Dr. Clark furnished the following history:

October 6th.—I was requested to visit a boy, three years old, who was suffering from retention of urine. On examining I found a congenital phymosis, and a scrotum enlarged to about three times its normal dimensions. After relieving the contraction of the prepuce by circumcision, I emptied the bladder with a No. 4 catheter, of about twelve ounces of urine; the distention was followed by temporary atony that required the use of the catheter for three or four days.

During the first week of my attendance upon him, an opening formed at the peno scrotal angle, that discharged about three ounces of fetid pus. I enlarged this opening to the extent of about two inches, and came in contact with a concretion situate in the depth of the wound under the pubic arch. It was my opinion at the time that the calculus had been impacted in the membranous urethra; that ulceration and perforation had allowed it to escape into the tissues outside; and that the channel through which it had escaped had almost immediately closed, for there was at no subsequent period the slightest escape of urine from the sinus through which the calculus was removed.

Dr. Satterthwaite, from the microscopical committee, made a report upon the tumor presented by Dr. Allin at the last meeting of the Society. It was found to be made mostly of spindle-shaped cells; there was also present a large number of round cells. The tumor was regarded as a periosteal sarcoma of the spindle-celled variety. Its malignancy was undoubted.

The Society then went into Executive Session.

NEW YORK ACADEMY OF MEDICINE.

OBSTETRIC SECTION.

Stated Meeting, Nov. 20, 1876.

Dr. Isaac E. Taylor, Chairman.

PLACENTA PRÆVIA: ITS PHYSIOLOGY AND ITS MANAGEMENT.

The Chairman laid before the Section the views which he had long held regarding the physiology and management of central implantation of the placenta. Fortunately, it was a rare occurrence. The location of the placenta, and how it came to occupy the position in which it was sometimes found, were questions that received special consideration. His remarks were based upon the following history of a case which had lately fallen under his observation:

A lady, æt. 34 years, Cuban, and the mother of five children, had been confined to her bed since June with malarial gastralgia. Distinct paroxysms of pain occurred at about two o'clock in the morning and at about the same hour in the afternoon. She became considerably enfeebled, although resolute, and at one time marked symptoms of peritonitis were developed, which subsided under the use of appropriate remedies. Her time for delivery was about the 20th or 25th of October. Dr. Taylor was called to visit the patient on the 25th of October, and found that she was suffering from considerable pain at intervals of fifteen or twenty minutes, without decided contraction of the uterus. There had been a slight show, but no hemorrhage. The pains became irregular, and after a time ceased.

On the 26th the pains were a little more active, yet there were no decided contractions of the uterus, and no hemorrhage. The cervix was long, and no distinct presenting part could be made out by vaginal examination. By external examination it became evident that there was a lateral presentation, and the fœtal heart was found to be acting well. On the 27th nothing special occurred. On the 28th a visit was made at about five o'clock in the afternoon, when it was found that she was having distinct uterine contractions—not a painless form of contraction, as some have supposed. There was, however, nothing specially urgent in the case, and the doctor left for home within a short time.

He had, however, scarcely reached there when he received a message to return as quickly as possible, on account of the occurrence of severe flooding. It seemed that the patient, from sitting in a chair, had attempted to rise and go to her bed, when the slight show increased to a rapid loss of blood, and she suddenly lost fully one quart. The appearance of the countenance indicated severe loss of blood. A vaginal examination was made immediately upon arrival, and the neck of the uterus was found open sufficient to admit two fingers, which were passed in an inch or an inch and a half, and a placenta was distinctly felt. The vagina was tamponed with a large sponge, and consultative assistance at once called. As soon as such assistance arrived, the woman was placed under the influence of chloroform, and version was performed by a combination of external and internal manipulation, only two fingers being introduced into the uterus. The placenta was separated over a small space, the fingers were passed up, and, by assistance from above—the uterus being pressed downwards—made to rupture the membranes, when version was completed. The child was perfectly bloodless. The pulse of the mother after the operation was rapid, and the respiration rather quick; but she ultimately did well.

The case was interesting because it illustrated so well the views Dr. Taylor had long entertained regarding the physiology and the management of placenta prævia, and which were so markedly at variance with those held by Barnes, Playfair, Schroeder, and others.

The views entertained by Dr. Taylor were that there was *no shortening* of the neck of the cervix during pregnancy; that the placenta, in cases of central implantation, was attached to the uterus at the *internal* os, and when found in the cervical zone, it was there because it had been driven down by the head of the child. The Doctor maintained that he had repeatedly demonstrated the correctness of these views by the introduction of a cylindrical speculum two and a half or three inches in diameter, during labor (a procedure that could be easily accomplished with multiparous women, in whom the central placental presentation occurred most frequently), and observing what was taking place. He had seen and the classes to which he had given the opportunity had also been able to see, the cervix open and close as uterine contractions came and went, as well as the exact spot where the blood came from. He had also been able to demonstrate, in the same manner and with the greatest certainty, that the placenta was not at the os tincæ at all until it had been brought there by the pressure produced by the descent of the child's head when presenting.

The head of the child, being in contact with the placenta, drove it down, when a uterine contraction took place, and when the contraction ceased the head receded, and with it the placenta. It was the gradual crowding down that separated the placenta directly from the body of the uterus, where it was originally attached; and when found at the os tincæ, in the cervical zone, it was there because it had been pushed there. The validity of that view was supported by the fact that when the Doctor visited his patient on the 26th, *the period beyond full term*, the cervix was found to be long, and no presenting part could be made out by vaginal examination. On the 28th, however, he found that uterine contractions were distinct, and that a placenta could be readily touched after passing through a cervical canal an inch or an inch and a half in length. Dr. Taylor maintained that the placenta in complete presentation was over the os internum; that the os internum, and not the os tincæ, as shown by Barnes, Cazeaux, and others, was the first to yield when labor began; hence the hemorrhage came from the centre.

Reference was made to the older view in accordance with which it was supposed that the hemorrhage was due to shortening of the neck, which began about the sixth or seventh month and gradually went on until at term the cervix had completely disappeared.

The next view was that entertained by Cazeaux, in accordance with which it was supposed that the lower portion of the uterus, during the last three months of pregnancy, underwent a special growth, and the placenta having obtained its full size, that that growth was the cause of the separation of the placenta from its attachments. Barnes's view was, that the detatchment of the placenta arises from an excess of growth of the placenta over that of the cervix, and adapted itself to the expansion of the cervix during the latter part of pregnancy. It was maintained that Dr. Barnes's diagrams, and one taken from Hunter, showing the safe placental attachment; the attachment in partial presentation, also safe; and the cervical zone, which was the unsafe, or the hemorrhagic zone, certainly set aside the view of non-shortening of the cervix, and in that contradicted the statements made by the author in the text of his book.

Playfair adopted the views of Barnes and Duncan, and claimed that about two weeks previous to labor painless contraction occurred which had a tendency to expand the cervix; the internal os gradually yielding until at the term of labor the uterus presented a perfectly oval form. From all those views Dr. Taylor dissented, and contended that the internal os remained intact throughout utero-gestation, and if a placenta was attached over it, that it also remained undisturbed until labor commenced. He had not only substantiated his views by direct observation during the progress of labor, but by post-mortem examinations in which the placenta had been found in the body of the uterus, although death had occurred from hemorrhage, and not in the neck at all. It is impossible for the placenta to grow in the cervix, and that it was necessarily attached to the body of the uterus. The uterus remained hermetically sealed until some cause brought on uterine contraction, such as a blow, a shock, a mental emotion, etc., and then labor commenced. Again, at full term, the pains began; contraction went on gradually expanding the cervix, whether placenta was there or not, the expansion beginning at the internal os; but suppose the placenta attached over that point, the result would be that it would be separated from the internal orifice before it was separated from any other portion of the uterus; the pains went on, slight hemorrhage occurred; the pains continued, the placenta became separated more and more, and the hemorrhage increased as a matter of course. If the external os was opened the size of a shilling piece, it was evidence that it had been separated probably to two-thirds the size of the child's head, and at any moment profuse hemorrhage might occur. Under such circumstances, Dr. Taylor proceeded to deliver the woman at once. There was no advantage in tamponing the vagina according to the older view, and waiting for farther expansion of the cervix.

Where the placenta could be felt in the cervical zone, the labor had placed it there; Barnes had not separated it as he believed; Nature had asserted her power and pushed the placenta down before the presenting part. What was the physician to do then? If the placenta was 5 inches in diameter, and the diameter of the child's head 3½ inches, it only remained to separate the placenta ¾ of an inch; if 6 in. in diameter and the head 4 in. in diameter, the

placenta remained attached only for a distance of an inch on each side; and now all that was necessary was to pass the finger up, separate the attachments at some point, rupture the membranes, perform bimanual version, and deliver if the child is malplaced.

Dr. Taylor had demonstrated his views repeatedly since 1852, although his first publication was in 1862.

Dr. Hubbard agreed with the chairman in the statement that central placental presentation was rare, having met it only three times in three thousand cases. He referred to one case in which the placenta was thrown into the bed by a uterine contraction,—the labor proceeded without farther trouble, and the woman was safely delivered. In a third case the placenta could be distinctly felt, was separated all around and removed, the hemorrhage at once ceased, and the labor went on in a natural manner.

Dr. H. then asked the question, why not proceed in that manner when the head or breech presented, and the child was either dead or there was no prospect of saving its life by version, instead of resorting to version as a general method of management?

Was not the woman subjected to greater risks, under such circumstances, by resorting to version than by proceeding as indicated?

The Chairman believed it unnecessary to separate the placenta completely, unless in an exhausted condition, and that a partial separation sufficient to permit of the rupture of the membranes was sufficient, as the operation of version could then be easily completed.

If the case was first seen when the os was nearly or completely dilated, it would probably be better to separate the edges of the placenta remaining attached, remove it, and let the case alone. The separation under such circumstances could be readily done. He did not deem it wise to permit the case to go until such a period was reached, and believed it to be the safer plan for the mother and child, as soon as the cervix was open as large as a shilling piece, to separate the placental attachments sufficient to permit rupture of the membranes and then complete the version by external and internal manipulation. If the head or breech presented, give ergot, separate the membranes, and let Nature deliver.

After the relation of several cases by different members, the Section adjourned. Immediately after the adjournment the Section was handsomely entertained by Dr. W. C. Livingston.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Meeting, November 17, 1876.

Dr. D. B. St. John Roosa, Vice-President, in the Chair.

EFFECTS OF LESIONS OF THE BRAIN UPON THE VISCERA, AND OF DISEASES OF THE VISCERA UPON THE BRAIN.

Dr. Eugene Dupuy remarked upon the above subject as follows:

Mr. President, Gentlemen—Notwithstanding the almost innumerable cases of diseases of the brain where autopsy always discovered lesions of a grave nature in the lungs, it is not more than six years ago that attention has been called to this most interesting point of pathology by my friend, Brown-Séquard. He showed that lesions experimentally produced in the base of the brain in guinea-pigs almost invariably give rise to hemorrhage in the lungs, in the heart, the stomach, the supra-renal capsules, the kidneys, the liver, and to congestion of the intestines. Except a few observations scattered in French and English periodicals, there is no mention to be found of these facts which are of such great importance for a correct prognosis and rational treatment of cerebral hemorrhage. Every one knows that in the majority of cases these hemorrhages are not fatal *per se*. Although I speak more particularly of cerebral hemorrhage, I shall comprise under such heading all diseases of the brain, such as tumors, abscess, fractures of cranium, inflammation of part of a lobe or of several parts, etc.

The facts which experiment has disclosed, bearing on the lungs, for instance, are the most interesting perhaps, because of the serious nature of a hemorrhage in lobes of the lungs, following and caused by an affection of the cerebrum. Œdematous patches of the lung tissue, sub-pleural large ecchymotic suffusion of blood, congestion of the lungs, are the usual consecutive lesions in the chest. The relation between the lung lesion and one in the cerebrum is so close in the human species, that Professor Ollivier, of Paris, has reported three cases of apoplexy, which he called pulmonary unilateral apoplexy, in which he found at the autopsies that with a hemorrhage in the left corpus striatum, having caused a right hemiplegia, there was congestion and apoplexy of the right lung. If you examine with care all the patients who may come under your notice, I am confident that you will always detect some trouble in the lung or the pleura of the same side with the palsied arm, and sometimes of both sides. The production of those alterations does take place very rapidly after the onset of the cerebral lesion, as it is an effect of it. While Dr. Brown-Séquard made his experiments on the subject, I being his assistant, then I could see the lesion in the lung take place under my very eyes, as the first lesion was being produced in the cerebrum.

The heart, in a less degree of frequency, is found to contain hemorrhagic spots after brain lesion. In animals the frequency is great enough, but not so in men. There is another morbid phenomenon produced by brain disease in human pathology: it is a state of the heart which so much resembles hypertrophy as to lead the inexperienced to commit an error in diagnosis. I believe that most of the patients who die of cerebral hemorrhage have that pseudo-hypertrophy of the heart, which, in its turn, is accompanied by dropsy. Such an opinion is strongly supported by the researches of Bouillard, Niemeyer, and others, who teach that that symptom never depends upon pure hypertrophy, but upon a weakening of the circulatory functions. Hence, Bouillard found by clinical accuracy what very recent researches in the physiology of the brain have proved.

On the kidneys the effects of brain lesions also manifest themselves in the shape of hemorrhage, congestion, etc. Ollivier has also shown that in human pathology cerebral hemorrhage gives rise to albumen in the urine within a very short time after the onset of the attack — sometimes, however, a long time after, but always at some period before death. Now this point must be understood in practice, in order not to commit errors in prognosis and treatment. In some cases albumen appears and disappears. The first case that came under my notice was in this very city, where I was visiting Dr. B.-S. some four years ago. A patient of his had been taken with palsy from hemorrhage on the brain; besides symptoms in the lungs and heart, his urine, which was examined by a physician of this city, was found to contain, two days after the attack, a quantity of albumen. I had examined the urine on the very day of the at-

tack, and it contained none then. It disappeared after the fourth day, and only reappeared some time before death, which followed in the train of large bed-sores.

Now, in regard to the correspondence of these lesions with particular parts of the brain, I have made quite a number of experiments within the last six years on these particular points and many others, and I think that I can safely say that any kind of lesion seated in any part of the brain, and even of the meninges, will produce in animals such symptoms, and the same is the case in the human subject, as I have found by analyzing an immense number of cases reported for other purposes.

But this is not all. Experimentation and clinical researches show that disorders of the viscera, thoracic and abdominal, also in their turn give rise to symptoms of lesions of the brain. My learned friend, Dr. Lépine, of Paris, has published a very excellent paper some six years ago, in which he has shown, supported by cases, that pneumonia does give rise to hemiplegia. He has very carefully collected his cases from the wards of Prof. Charcot and others, and his researches tend to show the connection between pneumonia and hemiplegia to be such that there is no room for supposing that in these cases there was only coincidence. Brown-Séquard has shown that lesion of the first thoracic sympathetic ganglion in guinea-pigs brings on vascular troubles in the ear and eye on the same side, rotatory movements, etc. Lépine himself has shown that injections of irritative substances in the lung tissue do cause constriction of the pupil on the same side, secretion of tears, etc. I have found that instilling a drop of absolute alcohol by the hypodermic syringe in the lung-tissue of a guinea-pig will give rise to transient paralysis of the anterior leg on the same side. Lately, Prof. Leudet, a most accurate observer, has reported that he has seen hemiplegia occur in a patient every time that he washed the pleural sac, from which he had aspired a quantity of effused matter. Such examples are not infrequently found when looking up cases in records, journals, etc.

The irritations of the liver in rabbits cause trouble of the innervation, which I doubt not have their parallel in human pathology. Those of the stomach are already too much known to require notice; let me say, however, that I have quite frequently seen the phenomena which Brown-Séquard has been, with Schiff, the first to notice. I mean the influence in animals exercised by lesions of the brain on the stomach. Physicians are well aware that a great majority of cerebral troubles originate in gastric disturbances; but I believe—and some few cases that have occurred to me in practice prove—that inflammation, or disorder of the brain of any kind, or of the meninges, are the most prolific producers of gastric disturbances—lesions of the intestines. I know that those physicians who devote special attention to diseases of children have noticed that sometimes disorders of the alimentary canal are found associated, in such a way as to suggest the relation of cause to effect, with inflammation of the middle ear. J. Frank, the learned pathologist, has indeed put on record that in man grave diseases of the liver do give rise to inflammation of the right ear. Now, gentlemen, I feel that I ought to explain here. There are practitioners who believe that the ophthalmoscope is the infallible detective of lesions of the brain. Some think even that they can localize the seat of the disease. In bringing to your notice that fact of possible connection between the liver disorder and the middle right ear inflammation, I do not intend to be credited with urging the use of the auriscope in order to discover the possible connection between the simultaneous disorders of the organs, and still less to locate anything in the brain, if there be also brain symptoms.

Experiments have taught me, however, that a strong irritation of the liver, while the cerebrum is exposed, will produce anæmia of the convolutions, but yet I do not mean to infer that such state of the liver in men or animals is productive of drowsiness, although that symptom is frequently met with in quite a number of liver complaints. I make that statement "en passant" because I know the stress that, with reason, is laid upon results of vivisection, and I think it but right to say that the state of the circulation *producing* sleep is a matter unknown as yet.

The intestinal irritation can cause hemiplegia under certain circumstances, a fact of the utmost importance in determining the real significance of the symptom palsy. Dr. Nicaire, of Paris, a distinguished surgeon, has lately brought before the notice of the surgical society of that city two cases which occurred to him. They were women past the critical period. The first suffered from right crural strangulated hernia. She had, as a consequence, left hemiplegia, with palsy of face of the same side; the attack came on gradually, and there was no aphasia; herniotomy was performed without opening the sac, and the patient was cured. The second was also right crural strangulated hernia. Hemiplegia supervened slowly, and was complete, limbs and face same side; as in the other case the mind was unaltered, and there was no aphasia; this patient died of peritonitis after the operation of kelotomy. Those cases, I repeat, have been reported by Dr. Nicaire especially to show that the palsy did not depend upon brain lesion by clot or otherwise.

I think that it is unnecessary to enlarge on the value and significance of the series of paralytic symptoms induced by a morbid influence exerted by diseased viscera upon the brain. I will now, gentlemen, try to offer an explanation for those phenomena, which, if acceptable, may probably suggest a mode of dealing with them efficaciously. I do not hesitate to say that those symptoms are all reflex in their nature, because there is no possibility of considering, for a minute, that irritation of the intestines, for example, will bring on paralysis in a direct manner. The reflex phenomena are brought about by the agency of vaso-motor nerves. At one time this system of nerves was the scapegoat in every disease; at the present time there is too little said about it. If a nervous system could be personified, this would be the one "qui ne meritait ni cet excès d'honneur ni cette indignité."

While discussing the pathology of reflex paralysis, which he thinks does not even exist, Prof. Vulpian states that, after all, lesions have always been found in such cases when the autopsies were carefully performed—I doubt not in the majority of cases. But nevertheless, the occurrence of the paralytic symptom contemporaneously with the visceral disease, I believe, go far to show a relation of cause to effect, and very certainly we all know that if a blood-vessel or a nerve-fibre be kept in an abnormal state for a length of time, their nutrition is impaired, and the parts which they subserve are *à fortiori* impaired. It matters not whether the impairment is brought about by dilatation or contraction, both permanent, of vessels. In the point at issue the fact to be kept in mind is that whether it be cases of the first series, *i.e.*, symptoms in the viscera during the occurrence of brain lesions; or of the second series, symptoms of brain affections during the existence of visceral diseases, we have to

deal with consequent, not a mere coincident element, and understand that it is always an irritative agent which is at work.

Correspondence.

LISTER'S ANTISEPTIC METHOD IN OVARIOTOMY.

To the Editor of The Medical Record.

Sir:—In the last number of the Record, I took to myself the credit of being the first to use Lister's antiseptic method in ovariotomy.

By the *British Medical Journal* of the 25th of Nov., 1876, just received, I see that I was mistaken. At a meeting of the Pathological Society of London, held on Tuesday, the 21st November, "Dr. Griffiths, of Swansea, exhibited two desmoid ovarian tumors removed respectively from females aged twelve and twenty-one. They were both removed under the bichloride of methyline, the *carbolic spray* being also used."

"In both cases the pedicle was ligatured with the carbolized catgut, and then returned into the pelvis," and both cases recovered without any untoward accident. Yours, etc,

J. Marion Sims.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from December 3 to December 12, 1876.

Magruder, D. L., Surgeon. When relieved by Surgeon McKee, to proceed to St. Louis, Missouri, and report upon arrival there, by letter to the Surgeon-General. S. O. 250, A. G. O., Dec. 4, 1876.

McKee, J. C., Surgeon. To report in person to the Commanding Officer Department of Arizona, for duty as Medical Director of that Department. S. O. 250, C. S., A. G. O.

Lippincott, H., Asst. Surgeon. Ordered before the Army Medical Board, in session in New York city, for examination for promotion, and upon conclusion thereof, to rejoin his station, West Point, N. Y. S. O. 250, C. S., A. G. O.

Comegys, E. T., Asst. Surgeon. Assigned to temporary duty at Fort Clark, Texas. S. O. 216, Dept. of Texas, Nov. 28, 1876.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending December 9, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Dec. 2.....	0	10	43	4	7	44	3
" 9.....	0	11	49	1	3	68	4

Prevention of Scurvy.—Mr. Robert Galloway, Professor of Chemistry in the Royal College of Science for Ireland, has recently published a pamphlet in reference to the prevention of this malady. His proposal is to restore to the salted meat the saline constituent which is removed from the flesh by the process of salting. This constituent is the phosphate of potash; and he suggests that it should be employed with salted meat, in the same manner as common salt is used with fresh meat. Mr. Galloway, who has a high reputation as a practical chemist, has brought the matter under the notice of the authorities, but, up to the present, has not been allowed a trial either in the navy or mercantile marine.—*British Medical Journal.*

Anæsthesia in Puerperal Convulsions.—Dr. John M. Julian, of Hoboken, N. J., thinks that too much reliance is placed upon anæsthesia in the general treatment of puerperal convulsions. Although the method is of unquestionable service in many cases, there is temptation to go to extremes which, in his experience, is not warranted. He writes:

"Whenever a two-thirds deposit of albumen is ascertained, scanty urine present, convulsions recurring either before or after delivery, and before a rapid pulse (the herald of danger), sets in, instead of placing our trust in the prolonged administration of anæsthetics —their benefit in such cases being limited to the alleviation of the eclamptic state—we should resort to the old—I feel sorry to say, rather neglected—practice of venesection, assisted, if need be, by the operation of transfusion. With the former we diminish, and with the latter we dilute as much as possible the poison contained in the blood. This is a ready method, and the only one, in my opinion, calculated to permanently quiet the recurring spasm, and re-establish the functions of the kidneys. In conclusion, I may be permitted to make the assertion, that in my own, as well as in the practice of others, I do not remember a single instance in which spontaneous diuresis became established that did not end in recovery."

Method of Preventing Cloudiness on Exploring Mirrors.—M. Sanundès, a medical student, communicates to *L'Union Médicale* (Sept. 23d) a new process of preventing the laryngeal mirror from becoming obscure. This consists of passing lightly over the mirror a cloth steeped in glycerine. The watery vapor contained in the expired air is dissolved completely in the glycerine and the cloud does not form. He proposes the extension of all glass and optical instruments liable to become obscured by cloudiness.

Scarlet Fever.—Mr. Pigeon, of Clifton (*Lancet*, November 25, 1876), claims marvellous success in the treatment of scarlet fever by the following method: "Anoint the patient twice daily with sulphur ointment; give five to ten grains of sulphur in a little jam three times a day." Besides this the room is filled twice daily with sulphur fumes. Under this treatment he says, "each case improved immediately, and none were over eight days in making a complete recovery, and I firmly believe that in each case it was prevented from spreading by the treatment adopted. One case was in a large school. . . . . As far as I can judge, sulphur is as near a specific for scarlet fever as possible."

Scurvy in the Arctic Expedition.—Despite the precautions taken by the British Government, scurvy attacked several members of the sledging parties. The cause of the outbreak is very innocently ascribed by the officers in command to the neglect in supplying the sledging parties with lime juice. The London journals very properly ask the question, Why this neglect?

Original Communications.

THE PROPER TREATMENT FOR LACERATION OF THE CERVIX UTERI.

By THOMAS ADDIS EMMET, M.D.

(Abstract of remarks made before the Medical Society of the County of New York. Phonographically reported.)

MR. PRESIDENT AND GENTLEMEN:—Two years ago I had the honor to deliver an address before this Society upon laceration of the cervix uteri as a frequent and unrecognized cause of disease, and I also pointed out a plan of treatment. Since that time expressions of disappointment have been given, because the results have not been gained which were promised. The failure to obtain such results as have been desired is due chiefly to want of proper care in the preparatory treatment for the operation.

If cellulitis has previously existed it will certainly return if every vestige of it is not removed before the operation is performed. Some have operated before the cysts, which form in the tissue of the cervix, have been properly emptied; before the congestion has been fully relieved; and before the parts have been gotten into the best possible conditions; and, as a matter of course, their operations have failed. Others have not properly denuded the surfaces to be united; have not observed due nicety in coaptating them after they have been freshened, and have failed to secure the desired results. For, it is necessary to obtain union by first intention. To this end the flaps should be freshened in such manner as to give as smooth and clean cut surface as possible, and then if they are adjusted with a reasonable degree of accuracy, and have been placed in proper condition preparatory to the operation, all congestion removed, etc., we may expect to obtain union by first intention. Cases are rarely seen in which the laceration does not need local treatment before operative interference.

Laceration of the cervix can be improved by treatment aside from operation; but the condition which has caused the woman to seek medical aid will invariably relapse, and it is for the purpose of preventing relapse that the operation is performed. It is to keep them well, after being under treatment. It has never been claimed that the simple operation will overcome every difficulty, but it will improve the local condition beyond what has been gained by previous treatment, and keep the patient from relapses. From one to three months are required for preparatory treatment.

The effect of the injury from child-birth is to arrest involution, if it be lateral laceration, in consequence of the irritation of the flaps, which separate as the woman assumes the upright position. If the accident occurs from very rapid labor or from the use of forceps with considerable traction, the perineum is ruptured not infrequently, and with this there is want of proper support to the uterus; it gets down upon the floor of the pelvis, and with the prolapsus there is also some degree of retroversion. Now when the woman attempts to walk, the flaps are forced far apart, the posterior lip catching in the cul-de-sac, and the anterior lip is crowded far forwards.

If after labor the cervix has cicatrized, glazed over, as the woman assumes the upright position, erosion forms again, there is profuse leucorrhœa, frequent show, backache, pains down the limbs, difficulty in walking, etc., and she seeks relief. When examined, the parts will be found to be congested, red, angry-looking, swollen, and in a condition which, until recently, has been mistaken for ulceration, sometimes for epithelioma, as well as for corroding ulcer of the uterus. As the lips of the wound are soft and become flattened, the injury cannot be readily recognized by the eye. Generally it can be recognized by the finger if the laceration is double, when the patient lies upon the back, because the neck of the uterus is felt wider than the body above. In cases in which there is any doubt, by drawing the posterior and anterior lips together the true condition will at once be revealed, and the neck is then often found to be smaller than natural.

Lateral laceration is often more difficult to detect, because the surfaces present an equal length upon both sides. When the laceration has taken place upon one side, the uterus becomes turned to the injured side, because of the inflammation which frequently follows the injury and attacks the nearest broad ligament.

This version results from shortening of the inflamed ligament, the two flaps gape, and with the uninjured side form a tripod with two legs shorter than the third one; the uterus, therefore, is necessarily tilted to one side.

In these cases the parts torn to the vaginal junction project into the passage at the same length of the uninjured side, and, being covered by the vaginal wall, the cervix presents a natural appearance. In cases of doubt, it is well to place the patient upon the knees and elbows, introduce a speculum, thus distending the vagina with air, and aiding gravity in bringing the uterus into its proper position, when it will be seen that a cleft exists in the neck of the uterus, extending perhaps not only to the vaginal junction, but into the vaginal wall itself.

When the uterus is tilted to one side from this injury, the sound can be passed in the median line to the fundus without giving by its use any indication of the true condition. The explanation is, that the sound passes through a patulous os and along the angle of the line upon one side of the cervix to the horn of the uterine canal of the opposite side; the direction from these two points being brought into the axis of the vagina from the position of the uterus.

The preparatory treatment consists in the systematic use of vaginal injections of hot water, counter-irritation in form of iodine or blisters over the region where cellulitis may have previously existed, emptying the cysts which have been formed by the gradual degeneration of the mucous follicles, keeping the flaps together by the use of cotton tampons saturated with glycerine in front and behind the cervix, and keeping the uterus anteverted as much as possible. The uterus should be lifted up by the finger, and should be retained in position by a properly-fitting pessary. When cellulitis has existed, it is very often found that it has been kept up by the entire weight of the uterus coming upon a shortened broad ligament. It becomes necessary in such cases to so fit a pessary that the dragging produced by the uterus will not be brought to bear upon such shortened broad ligament. But great care must be taken not to lift the uterus too high, for by so doing you will produce the same condition you wish specially to avoid. The cysts should be punctured with a small lance-shaped knife, stabbing the cervix in various directions. Scarcely an ounce of blood will be lost, as a rule; but if the hemorrhage be more than is desirable, it can be readily controlled by a vaginal injection of hot water.

After the puncture, Churchill's tincture of iodine is

brushed over the surface and carried into the canal, the flaps brought together and retained in position by glycerized cotton pads placed anteriorly and posteriorly. The puncturing must be repeated until the cysts have disappeared, and until the flaps have been reduced to the proper size.

The vaginal injection of hot water should be large, not less than a gallon, and should be repeated night and morning, administered with the woman lying upon her back.

As long as any tenderness can be detected in the neighboring connective tissue by pressure from the finger, the operation should be avoided, for you may be sure that a certain amount of cellulitis has previously existed, and that there is still remaining a condition which would require but slight provocation to re-establish the inflammation. After double laceration, partial constriction is often produced upon the neck as the parts cicatrize. This is often sufficient to obstruct the circulation in the flaps when aided by cystic degeneration. The starting-point is the irritation set up by forcing the flaps apart when the female is in the upright position; the mucous follicles become inflamed, their outlets get blocked up, and cystic degeneration follows, and as such cysts become distended by fluid, the mucous membrane will roll out to the os internum. From this cause the flaps become almost strangulated, and are placed in a condition similar to paraphimosis. In my former description of the operation, I advised that the surfaces should be freshened by means of scissors, leaving in the double laceration an undenuded tract of uniform width across the flaps, which, when brought together, would form the cervical portion of the uterine canal. Since that time, having closely watched the condition and changes after the operation in a number of cases, I have found that the os has frequently become too small. My rule had been to leave this undenuded tract at the width of the canal as it appeared at the bottom of the laceration, which is generally at the internal os. But when the canal was made of the same diameter between these hypertrophied flaps, it became too small after the operation, as soon as the uterus and cervix returned to the natural size. In my present plan I obviate this difficulty by leaving the freshened surfaces oval, so that the undenuded tract is now left trumpet-shaped. Now, as the uterus gradually returns to the normal size, this new canal becomes of a natural and uniform diameter throughout. To make the canal of the proper size, we must be guided by the amount of hypertrophy in the flaps. It must bear some relation to the increased size of the flaps, and the trumpet-shape is necessary, since the hypertrophy increases in degree from the bottom of the laceration towards the outer edges of the flaps. Immediately preparatory for the operation, I commonly have given a large vaginal injection of hot water, the effect of which is to contract the blood-vessels, and allow of only a moderate loss of blood. The mode of operating is to place the patient on the left side, and to use Sims's speculum or some other perineal retractor, to bring the parts into view. The first step is to bring the flaps together, and while they are lifted into apposition by means of a double tenaculum in the hands of an assistant, the uterine tourniquet is slipped over the cervix, below the point of vaginal junction, and tightened. Just before constricting the neck the precaution should be taken to draw up with a tenaculum, through the loop, sufficient vaginal tissue all around the cervix, that the flap may be brought together easily. The fold thus formed renders the tourniquet less liable to slip as the cervix becomes reduced in size from the escape of blood during the operation.

For freshening the surfaces I prefer the scissors, because of the greater rapidity with which the tissues can be removed. At the outer angles of the fissure the freshening should be as superficial as possible, for fear of cutting the circular artery. The introduction of the sutures is the most difficult step in the operation, on account of the mobility of the organ and the density of the diseased uterine tissue. I recommend that when the tissues are dense, the lance-pointed needles of Dr. Sims should be used, but when the parts are soft, the round needle should be employed. The short round needle has the advantage of making only a punctured wound, and the suture fills the track it has made so as to prevent the oozing of blood through the aperture, as sometimes occurs when the lance-pointed ones are used.

The round needle should, therefore, be used when possible. From three to four sutures are generally needed on each side. The first should be passed close along the bottom of the fissure, and should not involve the undenuded strip left to form the canal; the last, through the crown of the cervix, being more superficial, is easier of introduction, but needs to be passed with more care than the others, with the view of bringing the edges at the os and along the vaginal surface from this point into accurate apposition. If proper care is not taken, cicatricial tissue will be left, and it may be accepted as an axiom that a female is not well while cicatricial tissue exists upon the cervix uteri.

The sutures are secured in accordance with the plan recommended by Dr. Sims for the operation of vesico-vaginal fistula. The needle is armed with a short silk loop to which the wire is attached after it has been introduced. The ends of the wires are to be twisted over the "shield," but before being freed from the former should be bent over flat by means of a tenaculum, used as a fulcrum, under the suture at the end of the twist close to the line of union. The sutures are commonly removed at the end of ten days, and great care should be taken in withdrawing them, lest the edges of the wound be separated. The nearest portion of the loop should be cut, the woman lying upon her left side, so that it will continue to bind the parts in apposition until it has been drawn out. The suture nearest to the vaginal junction should be the first to be removed, for if tendency to gape in the line is seen, the remaining ones can be left several days longer, so that the ununited portion may heal by granulation.

The woman should remain in bed two weeks after the operation, and should not be allowed to get up for any purpose. The bladder must be emptied by means of the catheter. The bowels may be kept regular by proper diet, as there is no necessity of maintaining constipation as far as the success of the operation is concerned. On the second or third day after the operation, a vaginal injection of tepid water may be used if there is much discharge.

Lacerations of the cervix uteri are very common, and it is doubtful if a female can give birth to her first child without some degree of laceration taking place. But if slight, union may take place while the woman is in bed and the rent does not give rise to any subsequent trouble.

Lacerations through the anterior lip do no harm except to make vesico-vaginal fistulæ. They do no harm when backwards, except they run out upon the vagina and give rise to bands of cicatricial tissue which produce retroversion, or set up a peritonitis

from running into the cul-de-sac. It is only when the laceration is lateral that the chief trouble ensues. I have occasionally met with cases where it was impossible to demonstrate where the laceration took place, and yet the bad effects following the accident were recognized. It would seem as if partial laceration occurred from the internal os towards the outlet upon one or both sides without extending to the vaginal surface, while the mucous membrane prolapsed through the enlarged canal and os.

The appearance in such cases is that presented after dilatation with the sponge-tent when partial contraction has taken place above, and with dilated cervical canal the prolapsed mucous membrane can be seen through the patulous os. The cervix is generally but little enlarged in diameter, but the walls are thinner than natural. I have treated these cases by dividing the cervix through upon both sides, then increasing the width of the raw surfaces so as to narrow the canal, and bringing the edges together as for the lateral operation.

We frequently meet with cases in which nature has attempted to repair the injury, and there is left a dense mass of cicatricial tissue which has been formed by granulation in the angle. When this source of irritation exists there will be more disturbance of the nervous system than in the original condition, and the enlargement of the uterus remains. The only remedy for such cases is to remove by means of a V-shaped incision the entire mass, and secure the surfaces in apposition with sutures as in the operation for laceration.

When the case has been of long standing, numerous cysts are formed and ruptured, and as a consequence contraction takes place along the edge of the mucous membrane of the canal and vaginal cervix. The effect of this contraction is to evert the two former flat sides of the flaps into convex surfaces in relation to each other. Were we to simply freshen these surfaces in a superficial manner and attempt to bring them together, we should fail to approximate the outer edges properly without the sutures were twisted so tight as to cut out. This cicatricial tissue is so dense that, should union be secured, it will be only temporary. It is, therefore, necessary to remove entirely this projecting surface, and partially excavate, that the sides of the flaps may be brought into close contact.

After the operation for laceration of the cervix uteri the pessary is to be again introduced. For, if there has been retroversion, as soon as the woman begins to assume the upright position, of necessity the uterus begins to settle down upon the floor of the pelvis until by traction of the walls of the vagina upon the flaps an erosion is produced, and gives rise to congestion and increased size of the organ. The necessity for maintaining the uterus in its proper position is frequently entirely overlooked; not only as a measure of benefit before the operation, but as a real measure of obtaining beneficial results subsequent to its performance.

I have no hesitation in saying positively, and this conclusion has been reached as the result of a large experience, that not the slightest good will result from this operation without preparatory treatment.

The principles of the operation are simple, and its execution is not difficult under any circumstances; yet the greater success will attend the surgeon who looks most carefully to the details of the preparatory and subsequent treatment. Attention to the minutest detail is of the greatest importance; even more so in the this branch than in the field of general surgery, where its necessity has been so long and fully recognized.

A CASE OF PERITYPHLITIS, WITH OPERATION AND REMARKS.

By EDGAR HOLDEN, M.D.,

NEWARK, N. J.

Mr. K., residing in Hoboken, a stout, robust, and hitherto exceptionally healthy man, was seized with rigors and intense pain in the ileo-cæcal region on the 7th of November inst. The pain spread gradually over the whole abdomen, but chiefly expended itself on the hypogastric and hepatic region, the tenderness upon pressure being extreme.

The symptoms were such for several days as to lead to the conviction that an acute inflammation of the liver with peritoneal complication, and not a difficulty with the cæcum, existed. The temperature, however, was rarely above 101°, the pulse from 90 to 100; the skin moist, and the tongue, free from any particular redness, was covered with yellowish white coating. Excessive pain, anorexia, inability to talk or move without increase of suffering, the dorsal decubitus and gradual development of tympanitis led to a suspicion of deeper trouble, and on the seventh day the tenderness over the previously extensive area was evidently concentrated over the ileo-cæcal junction. An inguinal hernia of the right side, which had not been down since the beginning of the illness, complicated the case and also rendered the diagnosis somewhat uncertain. Waiting for rigors or some other evidence of suppuration, and finding none, the tympanitis being markedly increased, the pulse increased in frequency and cordy in character, with indications of high arterial tension, it was decided best to operate. It was now the twelfth day of the disease, and no satisfactory evidence of actual suppuration had prevented, save a very slightly increased and possibly only a fancied prominence over the supposed seat of trouble. An ordinary hypodermic syringe proved, however, the correctness of the conjecture that abscess existed, and upon withdrawing the needle a few drops of pus were found and examined under the microscope.

Through the kindness of the attending physician, Dr. Geisler, and a fortunate experience in a former paracentesis thoracis in a child of the family, every facility for operation was presented, and with the assistance of several prominent physicians the following operation was performed Nov. 18, 1876. After the induction of anæsthesia a more careful exploration of the abdomen gave rise still to doubt as to the presence of pus, and the hypodermic needle was again introduced as nearly as possible in the direction of the former puncture. About twenty drops of unmistakable pus of exceedingly fetid character were obtained. The dulness extended from the ileo-cæcal region upward to the liver, and over an area about four inches in width, but not downwards, as would naturally be expected.

A curvilinear incision was now made two and one-half inches in length, its centre just below the point of puncture of the needle and one finger's breadth distant, and in front of the anterior superior spinous process. A thick layer of adipose tissue rendered considerable tension on the retractors necessary, and when after careful dissection the fascia transversalis was being punctured, a sudden gush of disagreeable pus escaped, amounting to a little more than a pint, at first yellow, then sanguineous, and very dark in color. My finger was introduced, and the appendix vermiformis, surrounded with thickened tissue, could be felt at the lower extremity of the cavity, the ascending colon pressing towards the outlet, but evidently separated

from it by a thin wall, probably the peritoneum. No opening could be detected into the bowel or appendix. After an injection of warm salt water, a tent of lint was introduced, and the upper part of the incision closed with a deeply inserted wire suture and a large poultice applied. On the day following (Nov. 19th), the tympanitis had disappeared, pain considerably less, and the pulse again at a normal rate. From two to four grains of opium were given in the following twenty-four hours, according to the judgment of the attending physician, and yet a free evacuation of the bowels was had with little or no pain. A glass drainage tube $\frac{5}{8}$ of an inch external and $\frac{1}{4}$ internal diameter, with a bulb at one extremity and just long enough to enter the opening in the transversalis fascia, was introduced and secured by cord and adhesive straps, the poulticing being continued. Nov. 21st.—All symptoms favorable, no rise of pulse or temperature, and but little discharge; salt warm water again injected, both for cleansing and the ascertaining of amount of contraction of the abscess walls. A nodulated mass could now be felt through the abdominal walls at the site of the appendix. Opium in grain-doses twice daily. Milk punches and beef tea *pro re natâ*.

Nov. 23d.—Very greatly improved, free from pain, and able to move in bed without difficulty. The discharge upon the poultice small and of better character. The drainage tube was now removed, and the wound and cavity cleansed with the warm salt water as before. The suture in the upper part of the incision was also removed, healing having occurred. So far as could be ascertained by the fluid injected, the abscess cavity was nearly obliterated, a hard mass being distinctly felt over the ileo-cæcal region. Abdomen very slightly tympanitic again, but pulse, respiration and temperature normal.

Nov. 27th.—Patient free from all abnormal symptoms and apparently well, with the single exception of the still open wound in the abdomen. The discharge partly of laudable pus, partly of blood. The locality of the abscess clearly traceable upon careful percussion, the ileo-cæcal mass softer and smaller. Poulticing to be continued for a few days.

Dec. 1st.—Thirteen days after operation. The patient appears well, but very weak, is free from all pain and tenderness, rises in bed without difficulty, and but for a slight cold, contracted by exposure to a draught of air from a window, would be able to be out of bed; is only conscious of weakness when trying to walk. The abdomen wound has entirely healed. No foreign substance has been found in the discharges.

That this patient would have died if a few hours of longer delay had been allowed, can scarcely be doubted. The abscess wall was exceedingly thin, the intestines pressing forward into the incision, and the sensation being to the finger as if inside the peritoneal cavity, while the thickened fascia and muscular abdominal wall showed no evidence of yielding before the accumulation.

The infinitesimal prospect of a discharge into the intestine itself can hardly be considered.

Everything favored operation, and the entire absence of adverse symptoms after the operation was all that the most sanguine advocate of such procedure could desire. The failure to obtain any foreign substance in the discharge might seem to militate against the idea of an origin in the appendix; but (aside from such failure being no proof that a substance was not discharged) the perceptible hardness over the appendix for several days subsequent to the operation, and similar failure in several of the cases recorded by Dr. Buck in a pamphlet on the subject two years since, show that such origin (in the appendix) was probable.

That the abscess resulted from inflammation, *περι τυφλον*, and was therefore truly perityphlitic, and that prompt operation was proven justifiable by recovery, are the chief points of interest.

Reports of Hospitals.

BELLEVUE HOSPITAL.

Notes of Practice and Peculiarities of Treatment.

EPILEPSY—CESSATION OF THE FITS AFTER A SEA VOYAGE—RETURN OF THE DISEASE.

The case illustrated a fact occasionally noticed, namely, a cessation of the convulsions of epilepsy immediately upon making a trip across the ocean. The patient was seventeen years of age; had had the fits since he was three months old, until five years ago, when he came to this country from Ireland. After his arrival the fits almost entirely ceased, but had returned, and it was for their treatment that he had come to the hospital. In certain cases of epilepsy a marked improvement in regard to the occurrence of convulsions is brought about by a trip at sea. Another practical point was illustrated by the case. It was very difficult to determine to what extent his intellect had been affected, for the reason that the boy had never been sent to school, or rather he was not allowed to remain in school, and his education had been entirely neglected at home. It was regarded as a point of special importance that epileptics should be regularly subjected to mental exercise.

PROLAPSUS UTERI CAUSED BY TRACTION FROM BELOW—SUPER-INVOLUTION OF THE UTERUS—RECTOCELE—CYSTOCELE—RARE COMBINATION.

The patient was a woman, æt. 37 years, who had been married sixteen years, was the mother of twelve children, the youngest sixteen months old, and she had also had two miscarriages. Her chief symptom was a burning heat in the vagina. She had had no menstrual discharge for six months. Upon examination it was found that a most remarkable atrophy of the uterus had taken place, the cervix almost entirely gone, the body not more than one-half its normal size; and that but little involution had occurred in the vagina and perinæum. The cessation of the menses could therefore be readily explained. The sub-involution of the vagina and perinæum had given rise to the rectocele and cystocele. This little uterus had already settled from its normal position, and it was prophesied that ultimately the organ would be dragged down and out from the woman's body by the traction made by the prolapsed vaginal walls. It was thought the condition of the patient, with reference to the cystocele and rectocele, might be improved by operative procedure, although the prospect of success was not at all flattering.

PROLAPSUS UTERI CAUSED BY DIRECT PRESSURE FROM ABOVE—POLYPOID GROWTH IN THE URETHRA.

The patient, æt. 60 years, had suffered from vesical tenesmus two months, and it had been so severe that prolapse of the uterus had been produced. The irresistible and continuous desire to evacuate the bladder had kept up a constant bearing down; expulsive effort and displacement of the uterus had been the result.

But what gave rise to the vesical tenesmus? Upon examination, a small polypoid growth was found in the urethra. It would be hardly fair to say that a urethral polypus had caused prolapsus uteri, but it had acted as a cause in exciting an influence that did give rise to such a condition.

HYDRORRHŒA—CARCINOMA OF THE CERVIX.

The chief interest in this case was the sparseness and yet the gravity of subjective symptoms. Menstruation had ceased six months ago; three months ago the woman began to have a watery vaginal discharge, which had continued up to the time of the examination, and which had recently been tinged with blood. There was a fixed pain above the pubis, and so severe that the woman was unable to sit still. Her face was haggard.

On physical examination, an exceedingly friable fungous growth, which bled upon touching it, was found involving the entire cervix uteri, and probably passing beyond the vaginal junction into the body. All that was recommended in way of treatment was to let the woman take opium sufficient to make her comfortable, and to use an injection composed of tannic acid ʒ i., carbolic acid gr. xv., and water Oj.

If the growth had involved only the cervix, and to only such an extent as would permit of amputation by means of the galvano-cautery wire *above* the disease, the operation would have been recommended.

PREPUTIAL CONDYLOMATA, BENIGN IN CHARACTER.

A few suspicious-looking growths were seen upon the prepuce of a young man, whose statements were such as to entitle him to full credence, and it was believed that they had occurred independent of gonorrhœa, chancroid, or chancre. In other words, they were believed to be of non-specific origin. They were snipped off with scissors, and the stump was cauterized with chromic acid.

URETHRAL STRICTURE INDEPENDENT OF ANY ANTECEDENT GONORRHŒA OR POSITIVE INJURY WHICH CAN BE ASCERTAINED.

The young man had been sent for treatment on account of some nervous trouble, his physicians suspecting that the pains in the back, gradually extending over towards the groin, and finally down the groin and upon the inside of the thigh, and accompanied by dribbling of urine after the act of urination was supposed to be completed, was due to some urethral irritation. A careful investigation had also excluded masturbation from the history of the case. Upon examination, it was found that the meatus urinarius was abnormally narrowed, and it was remarked that perhaps in 99 out of 100 cases of trouble after micturition this condition would be found to be present. The meatus was cut until it admitted a 32 French scale.

SYNCOPE ATTENDING THE INTRODUCTION OF A URETHRAL SOUND.

The case was interesting as showing the intimate relation existing between the nervous system and the genito-urinary apparatus. The first time the instrument was introduced into the patient's urethra, he toppled over in a fainting fit. It was said that this seldom occurred but once, and that, as a matter of precaution, it was well always to have the patient placed in the horizontal position whenever, for the first time, the urethra is to be explored.

FRACTURE INVOLVING THE ELBOW-JOINT.

The principle involved in the treatment of the two cases seen, although not new perhaps, is of sufficient interest to warrant repetition. The danger to be avoided is anchylosis. The method of treatment was believed to be applicable to all cases involving the joint.

1. Extension until primary irritation has entirely subsided.

This can be done by means of the weight and pulley, with the arm in a straight position.

2. When the irritation has subsided, then lock the limb up in a plaster-of-Paris splint, with the fore-arm flexed at a right angle with the arm and placed midway between pronation and supination.

3. After it has remained locked up for perhaps ten days, the splint should be removed and gentle passive motion commenced and persistently kept up until motion at the joint is secured.

Two prominent obstacles to carrying out this plan, are the groans of the patient and the timidity of the young surgeon. One is quite apt to be excited by the other, but the latter must be set aside to a very great extent if the groans of the patient are not subsequently to be turned into curses when he finds out that he cannot even wipe his own nose with the hand belonging to the injured member. In the cases before us this manipulation could be performed with great ease and comfort, and the hand could also be carried to the top of the head without difficulty. The results thus far were exceedingly favorable, but by persistent continuation of the passive motion it was believed that the movements of the limb could yet be materially improved.

In another ward, and under the charge of another eminent visiting surgeon, a case of like character with the above was seen, and the plan of treatment strongly insisted upon was, that the joint should be let entirely alone until all inflammatory action had disappeared (we are now speaking with reference to overcoming the tendency to anchylosis invariably present), perhaps six weeks, or even more, and then little by little the rigidity could be overcome, daily moving it, making flexion and extension more and more, until at the expiration of four, five, or six months good motion could be established; the patient reaching his own nose, mouth, throat and head, etc. It was said that the patient could be anæsthetized and full flexion and extension made; but that procedure was objected to upon the ground that the joint would certainly relapse into the former semi-anchylosed condition, perhaps be made worse, and that ultimately the slow process of overcoming the rigidity would be necessitated.

The timidity of the young surgeon in this instance might be regarded as a valuable accomplishment.

AORTIC INSUFFICIENCY—LITTLE OR NO COMPENSATORY HYPERTROPHY.

One or two practical points presented themselves in the case before us which are worthy of mention.

1. The fact that little or no cardiac hypertrophy attended the aortic lesion rendered the prognosis unfavorable, because what the heart needed was more powerful walls to counteract the effect produced by the valvular insufficiency and restore equilibrium to the circulation. As it was, the man suffered: 1, from cardiac disease; 2, from interference with the venous flow; and 3, imperfect digestion, as the result of chronic congestion produced by such interference with the circulation. He therefore had lost flesh and strength, and was in an anæmic condition.

What was to be done for the patient under such circumstances?

It was remarked that the rational treatment would

be to make the heart act, and so restore the cardiac impulse that it would remove the venous congestion; but as a matter of practice it was believed to be better to begin at the other end, and treat the results produced by the obstructed circulation. The man was anæmic, hence iron was indicated. His digestion was bad, and although dependent on the cardiac disease, an effort was made to improve it by the use of such a remedy as would favor a restoration of the appetite and assist the digestion. Subsequently, treatment could be directed to the condition of the heart itself. The first remedy prescribed was citrate of iron and quinine in ten-grain doses three times a day, before meals. In addition, for that particular case, it was recommended to give the following:—

℞. Pepsin..... grs. x.
Acidulated wine (Rhein or sherry)... ℥ ii.
Acid. hydrochlor. dil..... gtts. xx.
M.

To be taken with each meal.

ANEURISM OF THE ARCH OF THE AORTA—ADVANCED CONDITION WITHOUT SPECIAL SYMPTOMS—STRIDULOUS COUGH.

A male patient, æt. forty-four years, a laborer, without history of constitutional syphilis, noticed "something in his swallow" about eight months since, and nine weeks ago had an attack of bronchitis, which for several days had been preceded by a smothering cough.

Near the junction of the second intercostal cartilage with the sternum was a rounded tumor, elevated about half an inch above the surrounding parts, pulsating synchronous with the heart-beat, and when auscultated gave a *bruit*. This tumor seemed to have been developed imperceptibly, and had not been attended with the usual pain, although the pressure had been sufficient to cause it to make its way through the chest-walls and show itself externally. There was a stridulous cough, but the fact that the respiratory murmur was exceedingly feeble was regarded as evidence that it was probably due to pressure upon the trachea.

VARICOCELE—SIX CASES TREATED BY ONE METHOD.

We saw seven cases of varicocele, in five of which the disease was confined to the left side, and in the remaining two it was developed upon both sides. Six of those patients were under treatment by means of mechanical pressure afforded by a truss, and this was aided by a suspensory bandage. The odd case, the disease being only slightly developed, was treated by means of the suspensory bandage alone. Support the pendant parts and at the same time make moderate compression immediately over the external abdominal ring. To make pressure, an ordinary hernia truss was used, with the addition of a perineal band to secure it perfectly in position. The aim was to make such an amount of pressure as would moderately compress the veins at that point, and maintain it night and day, the truss being removed only for purposes of cleanliness. It was believed by the visiting surgeon that we should not resort to any more violent means of cure in a majority of cases, and that in a large proportion favorable results might be expected.

DIABETES MELLITUS—EXHIBIT OF THE QUANTITY OF WATER DRANK AND THE QUANTITY ELIMINATED BY THE KIDNEYS.

The case was interesting because it illustrated the statement that the diabetic patient eliminates more water, by way of the kidneys, than he drinks.

There has been a strong conviction that the consumption and elimination of water may be equal. The specific gravity of the urine in the case before us was 1036, and it contained sugar as demonstrated by Trommer's & Fehling's tests.

Oct. 5, the man drank 15 pints of water and passed 150 ounces.

Oct.	6,	drank	13	pints	and passed	120	ounces.
"	7,	"	14	"	"	130	"
"	8,	"	12	"	"	110	"
"	9,	"	11	"	"	106	"
"	10,	"	14	"	"	150	"
"	11,	"	13	"	"	146	"

His treatment consisted in the administration of one grain of opium three times a day. Milk, eggs, and meat were the chief articles of diet.

Progress of Medical Science.

DEATHS FROM VIPER-BITES IN FRANCE.—M. Vian-Grand-Marais has collected the notes of three hundred and seventy cases of viper-bites which have occurred during the last twenty years in the departments of the Loire-Inférieure and of La Vendée. Fifty-three of these cases proved fatal. Many distinguished scientists and physicians maintain that the bite of the viper is not fatal to man, but these figures show the danger of allowing such a theory to be propagated.—*Journal de Méd. et de Chir.*, November, 1876.

ŒSOPHAGOTOMY.—M. Cazin, of Boulogne, has recently performed this operation under the following circumstances: a woman swallowed a piece of bone, which became impacted in the œsophagus in such a way that it could not be pushed down into the stomach. M. Cazin decided to perform œsophagotomy, although a considerable degree of hypertrophy of the thyroid gland rendered the operation difficult. When the foreign body was reached, the surgeon seized it with forceps, but could not remove it without risking a dangerous laceration of the mucous membrane. He then had recourse to a procedure employed by Velpeau, which consists in introducing into the œsophagus a piece of pasteboard rolled up in such a way as to surround the foreign body and thus detach it from the mucous membrane: by this method the bone was removed without difficulty. In closing the wound, M. Cazin employed separate sutures for the two tunics of the œsophagus, so that the internal sutures ran no risk from the contractions of the muscular tunic. An œsophageal tube was introduced through the nares and left in position for twenty-eight hours. The patient was fed through the tube, and in this way the difficulty of nourishing her was removed.—*Journal de Méd. et de Chir.*, November, 1876.

NERVOUS COUGH DUE TO ANTEVERSION OF THE UTERUS.—Malachia de Christoforis reports the case of a woman, aged twenty-three years, who had been treated for a nervous cough for a long time with antispasmodics, but without success, and was finally sent to him for a laryngoscopic examination. The patient had been pregnant once, two years before, but she aborted at the third month. Since then she had had a slight leucorrhœa, and lumbar pains, which were augmented by walking or standing. The examination of the thorax, abdomen, and larynx gave negative results. There were no painful points on the vertebral column. The cough occurred only during the day, and consisted of frequent, short paroxysms, with intervals of repose varying from half an hour to two hours. No expectoration. The cough ceased

immediately when the patient lay down. For over a year she had often suffered from dysuria.

A vaginal examination revealed marked anteversion and considerable enlargement of the uterus. In the dorsal decubitus the organ resumed very nearly its normal position. The uterus was replaced and kept in position by Hodge's pessary, and the cough stopped at once. A few days later the pessary was withdrawn, but the anteversion was then reproduced, and the paroxysms of coughing returned and continued until the pessary was reapplied. At the end of a year the uterus was very much diminished in size, and the anteversion so much modified that the patient did not cough even when the pessary was removed.—*Le Lyon Médical*, November, 1876.

New Test for Albumen in the Urine.—At a recent meeting of the *Société de Biologie de Paris* M. Bouchard read a paper on the employment of the double iodide of mercury and potassium as a test for albumen in the urine. According to him, the test is very delicate, and so much so that the absence of albumen may be positively affirmed, when the urine does not cloud on the addition of this reagent. There are certain sources of error in the test, however, which must be borne in mind:

1. The error may depend upon the reagent itself, when it can be easily avoided by adding an excess of iodide of potassium to the solution.

2. If mucine be present in the urine, or white precipitate analogous to the albuminous precipitate, it is formed on adding the double iodide, but it forms slowly, while albumen is thrown down at once.

3. If the urates be present, a precipitate may also be thrown down, but it forms slowly in the middle, instead of at the bottom of the test-tube; is not flocculent; and finally disappears under the influence of heat.

4. When the urine is alkaline, a precipitate may form even if no albumen be present, but it has a gray color, and becomes black in a few seconds.

5. The presence of alkaloids in the urine may also lead to the formation of a precipitate, but it is not flocculent, begins to form in the middle of the test-tube, and disappears under the influence of alcohol or heat.

In a word, every precipitate which persists after the employment of heat is due to the presence of albumen in the urine.—*Le Lyon Médical*, November, 1876.

Mode of generating Sulphurous Acid.—Mr. Thomas W. Keates suggests a ready and simple method of producing this acid for disinfecting purposes. Bisulphide of carbon, when mixed with petroleum and burned in a properly constructed lamp, will generate sulphurous acid with the other usual products of combustion. In a room containing thirteen hundred cubic feet of air, it was found that by burning two hundred and eighty grains of the bisulphide with a single wick, the atmosphere became so charged with the sulphurous acid, that it was impossible to remain in the room more than a few seconds. In twenty minutes after lighting the lamp, the air was unbearable. Mr. Keates has designed an apparatus for the purpose of disinfecting, which consists of a lamp enclosed in a metal case about three inches in diameter, and eight or nine inches high, with holes at the bottom for the admission of air, and others in the top for the escape of the sulphurous acid. This can be carried about and left in closets, holds of ships, etc., and, it is said, without any danger.—*The Lancet*, November 18, 1876.

Trepanning as a Prophylactic.—M. Sédillot has already presented several communications to the *Académie des Sciences de Paris*, recommending preventive trepanning in cases of fracture of the skull with splintering of the internal table, to avoid the usually fatal complications of this injury. He has now collated one hundred and six cases of this sort of injury, which he publishes in support of his recommendation. Of these cases seventy-seven were trephined and twenty-nine were not. Nine of the operations were preventive—that is, they were performed before the appearance of the primitive or consecutive accidents; sixty-eight were curative—that is, they were performed to remove grave complications such as paralysis, convulsions, or coma. In twenty-one of the one hundred and six cases the external table was not fractured; and as the symptoms, in most of these cases, were not marked, the injuries were often thought to be slight.

Of the twenty-nine cases that were not operated on, one recovered and twenty-eight died; of the nine cases in which preventive trephining was performed, six were cured; of the curative trephinings, twenty-one were performed during the first five days after the injury, and eight of the patients recovered; forty-seven were performed after the fifth day, and fifteen patients recovered. The mortality was consequently proportionate to the delay in the application of the trephine. When the operation was preventive two-thirds of the patients were saved; when it was curative, but performed early, over one-third were saved; when performed late, less than one-third; while only one case in twenty-nine recovered without an operation.

In the diagnosis M. Sédillot suggests that auscultatory percussion may help the surgeon.—*Le Lyon Médical*, November, 1876.

Aneurism of the Arch of the Aorta that simulated a Pleuritis Sinistra.—Marc F——, a drayman, thirty-eight years of age, of a robust constitution, was suddenly seized with a violent stitch in the side and intense dyspnœa, while walking alongside his cart on July 31st. He fell in the street and had to be carried to his home. Fifteen days later he was removed to the hospital De la Croix-Rousse, in Lyons, where he was placed under the care of M. Soulier. At that time the stitch had disappeared, but the oppression persisted; respiratory movements, 40; pulse, 104; slight cough. A physical examination revealed flatness, loss of vocal fremitus, and loss of the vesicular respiratory murmur over the whole of the left lung. A slight, soft murmur was heard posteriorly over the situation of the left bronchus. The voice-sounds were the same over both lungs, but the whisper-resonance was exaggerated on the left side. Mensuration showed that the left side of the thorax was not enlarged. A diagnosis of pleurisy was made. On September 2d the patient had a severe attack of hæmoptysis. On September 9th he had another attack of hæmoptysis, in which large clots of blood were coughed up, and which proved fatal in a few minutes.

At the autopsy a small sacculated aneurism, as large as a nut, was found on the under surface of the arch of the aorta. The aneurism was filled with a firm clot, and it compressed and obliterated the left bronchus. The clot and the thin aneurysmal sac presented fissures which opened into the left bronchus, and through which the terrific hemorrhage took place. There was complete splenization of the left lung. The right lung and both pleuræ were perfectly normal. The case is of interest on account of the difficulty of the diagnosis.—*Le Lyon Médical*, November, 1876.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, December 23, 1876.

THE METRIC SYSTEM IN PRESCRIPTIONS.

Before discussing the comparative merits of the metric and our present system, it will be desirable, we think, to succinctly state the principles upon which the former depends, so far as it relates to pharmacy and the dispensing of medicines.

In this connection we deal with a single unit, the Gramme,* equal to a little less than 15½ grains Troy. All integral quantities are expressed in multiples of this, and all fractions in decimals, the decimal point being always placed in its proper position between the integers and the fraction, in the same way that we place the *point* between dollars and cents in monetary notation. The fractions have definite names according to the position which their units occupy, thus *grammes* 1.642 may be read, one gramme, six decigrammes, four centigrammes, and two milligrammes, just as in our currency the figures $1.642 may be read one dollar, six dimes, four cents, and two mills. This form of expression, however, is seldom employed, as we usually confine ourselves to *dollars* and *cents*, at the same time always having in mind the meaning and relations of the dime and mill. In metric pharmacy, likewise, the gramme and centigramme are the terms usually employed.† For instance, it is customary to say thirty centigrammes in preference to three decigrammes, just as we say thirty cents, rather than three dimes, although either form is correct. The *milligramme* in pharmacy, like the *mill* in currency, is rarely used, simply because so small a quantity is seldom called for. The terms decagramme, hectogr., and kilogr. are not used in prescriptions, the number of grammes required, being expressed in ordinary Arabic numerals.

The extreme simplicity, therefore, of metric pharmacy, and its absolute correspondence in principle and detail with our own currency system, are features not to be overlooked. The above is the whole of the metric system so far as it immediately concerns us.* The manner in which one can at present use it may be best shown by an example.

Premising that

		Grammes.
gr. i.	=	0.064
gr. xv.434.	=	1.000
f ℥ i. (U.S.)	=	29.544
℥ i. Troy	=	31.103

we immediately perceive that if we desire to transpose an ordinary prescription into a metric one, we can in the great majority of instances dispense with fractions (in our mental calculations), and use convenient approximations, thus:

		Grammes.
gr. i.	=	0.06
gr. xv.	=	1.00
℥ i.	=	30.00

The following prescription, therefore, metrically expressed, becomes:

	Grammes.
℞. Hydrarg. bichlor. (gr. ij.)	0.12
Potassii iodidi (℥ ss.)	15.00
Syr. sarzæ co. (℥ iv.)	120.00

M.

Dose, teaspoonful three times a day.

In reference to the above we ask attention to several points. First, it is expedient for the present to write the word *grammes* in full, over the first line of figures.† Second, whenever a less quantity than a gramme is ordered, the zero (0) should always be placed before the decimal point. It will be noticed in the example given, that the *syrup* is ordered by *weight*. This is in accordance with Continental usage, the German Pharmacopœia expressly stating that every ingredient in an officinal preparation shall be determined by weight.‡ The use of the cubic centimetre, as suggested by some,§ would throw us out of uniformity with European practice, and would be attended with many of the evils which accompany our present employment of measures of capacity. If we are going to use the metric system at all, let us employ it properly, and in conformity with established usage. When a *small* quantity of a fluid is prescribed, it is often the custom to order it in *drops*. This may also be done in metric prescriptions. Many physicians, however, aware of the varying size of drops in different preparations, prescribe small quantities in *minims*, and are innocent enough to believe that the apothecary dispenses accordingly. We venture to say that not one druggist in ten measures the

* The complete system of metric weights is as follows:

1000	100	10	1	.1
kilogramme,	*hectogramme*,	*decagramme*,	GRAMME,	*decigramme*,

.01	.001
centigramme,	*milligramme*.

† "Les auteurs de formulaires recommandent tous de ne se servir que des termes *grammes* et *centigrammes*." Dorvault, *L'Officine*, Paris, 1875, p. [illegible].

* We shall not here discuss metrics in its relations to measures of length, area, or capacity, as these are not involved in pharmaceutical operations.

† Some physicians in this city have the word printed upon their prescription blanks at the upper right-hand corner.

‡ *Mensuris nunquam, sed semper ponderibus liquorum quantitas indicanda et determinanda est.* Pharm. Germ. 1872, p. XII.

§ The Medical Register of New England, 1876.

minims with a *pipette*, the proper way, or even with a minim graduate, but simply gives as many drops as are ordered minims in the prescription. The minim and the drop, then, being to the apothecary practically the same, the abandonment of the minim will not be much of a loss to pharmacy. Domestic dosage is the same in the metric as in the old system, the teaspoon, tablespoon, etc., being used as heretofore.

Having now explained the principles and practice of metric pharmacy, we are in a position to consider its advantages and disadvantages, as compared with our present system.

RELATIVE ADVANTAGES.

℞ Metric System—Simplicity.	Old System—Complexity.
I. A single unit—the *gramme*.	Five units of weight—*grain, scruple, drachm, ounce, pound.* Four units of capacity—*minim, fluidrachm, fluid ounce, pint.*
II. All medicinal substances are dispensed by weight.	Some are dispensed by weight, others sometimes by weight, and sometimes by measure.

III. Convenience in calculating and altering formulæ (metric). If, for instance, in the prescription above given, it seems desirable, upon a patient's second visit, to increase or diminish the quantity of the active ingredients, this is readily effected by the addition or subtraction of a few centigrammes, the quantity of menstruum and dose remaining the same. If, again, the formula is suitable for an adult, and we wish to graduate it for a child, and make it only one-sixth as strong, the prescription would be:

	Grammes.
℞. Hydrarg. bichlor.....	0.02
Potass. iod.....	2.50
Syr. sarzæ co.....	120.00

M.

S.—Teaspoonful three times a day.

If, now, we wished to effect this same apportionment in the original prescription, written in the usual manner, we would be obliged to write, *Hyd. bichlor.* gr. ⅛, a quantity which the apothecary could not directly weigh (for lack of a ¼ gr. weight). He would therefore weigh out one grain, and divide it by guess-work into three portions, one of which (perhaps equal to the others, but probably not) would be dispensed. Coming now to the iodide of potassium, the ℥ss. would have to be reduced (in the prescriber's mind) to grains, 240, and this divided by 6, giving 40, and this changed to Roman notation, xl.; and, five times out of six, we would have to give a special extra thought as to whether the x comes before or goes after the l.

In comparing, then, the relative merits of the two systems, we find that the advantages appear to be all upon one side; and we frankly confess that, if there are any comparative disadvantages in the metric system, we have thus far been unable to discover them.

The question as to the *expediency* of the adoption of the metric system in prescribing will be considered in our next.

THE MANAGEMENT OF OUR ASYLUMS.

FROM a popular point of view the office of medical superintendent of a lunatic asylum is not a very desirable one. Judging from the reports in the daily papers of maltreatment of patients, it would appear that as a class, the physicians are not only neglectful of their duties, but positively cruel in their ministrations. It is so easy to create a sensation by detailing the wrongs of some poor lunatic, that it is not a matter of surprise that the reporters of the daily press seize upon the slightest pretext for so doing. The apparent plausibility of these stories is such as to create a profound impression upon a sympathizing public, and react in a manner that is in the highest degree detrimental to the best interests of the asylums.

The medical profession, however, are prepared to take the stories for what they are worth, and place their own interpretation upon the animus which dictated their circulation. From the character of the medical superintendents of these institutions we have a right to believe that the charges of intentional inhuman treatment are entirely groundless, and we should be content to suspend judgment until the time for vindication arrives.

A week or two ago the daily papers detailed the account of a helpless female, who for no apparent reason was hastened to a lunatic asylum, and there kept in forced confinement for several days. To other sensitive and lone females, who were liable to become disabled in the street, this was not a very assuring evidence of personal safety in a free country, and no doubt many read the dramatic descriptions with feelings akin to positive horror. It is needless to say that the matter was duly investigated by the authorities, when it was proved that the poor woman was really insane, and a fit subject for treatment in an asylum. Then the papers became silent on the question of right and justice in the matter; and so it was, from a sensational point of view, judiciously, if not ignominiously, dropped.

Next in the course of events, and as a needful seasoning for dull and unsatisfactory political news, another victim of asylum cruelty is found, who is duly interviewed by a reporter, and another horrible story started. It is stated that a helpless patient was driven naked to a bath through a long hall, was confined in a strait-jacket, and otherwise roughly used at the option of her attendant; and that she was so forcibly fed, that the instrument used for the purpose inflicted a serious injury upon her palate.

On its face this also appears to be a very bad case. If, however, we consider the ordinary difficulties in the way of treatment of the class to which the patient belonged, it is easy to place a charitable construction on the worst possible interpretation of the affair. At least, so far as the investigation has gone, there is no proof that the medical superintendent was remiss in his duty, or that the attendant wilfully abused her trust.

THE ARCTIC EXPEDITION.

The English journals are still discussing the causes of the recent failure of the Arctic expedition. The general opinion seems to be that the greatest difficulty in the way of success was the occurrence of scurvy. It now appears that the latter disease was due to a neglect to supply the men with sufficient lime-juice, and that such neglect was owing to the fact that the commander of the expedition did not believe in its efficacy. It would seem from this that our own naval authorities have not erred in their recent interpretations of naval discipline. From present appearances, however, our cousins are not to be held altogether blameless for their presumptive interference with the duties of the medical staff.

PROBING OF WOUNDS OF CAVITIES.

We are gratified to learn that in a recent case of gunshot wound of the abdomen, admitted to Bellevue Hospital, that no attempt was made to search for the ball by probing. This is such an exception to the general rule in cases admitted to hospital, that it deserves special mention. In the present instance the patient will evidently have the best chance for recovery; and, in case of death, which from present indications is not improbable, there will be no question concerning any meddlesome interference on the part of the surgeon in attendance.

Gunshot Injury of the Musculo-spiral Nerve.—Dr. E. Owen was consulted by a gentleman, October last, who was injured a year previous by the accidental discharge of a gun loaded with corn-shot. The contents entered the arm, and at the time of the examination by Dr. Owen (Oct. 11) there was numbness over the back of the head, with no power over the extensors of the thumb or fingers. The pronator radii teres and the flexors of the wrist and fingers retained their power. For some time after the accident there was no sensation over the back and outer side of the forearm, but at present he feels a pinch, like the sensation caused by a red-hot iron. He is recovering the use of the hand, under the care of Dr. Kellgreen, of the Swedish Institute. The treatment consists of various gymnastic and manipulatory exercises. The shot-corn (twenty-four in number), searched for in vain by the surgeons, have worked up from the deep tissues to the skin during this treatment.—*The Lancet*, November 18, 1876.

Reviews and Notices of Books.

Transactions of the New York Pathological Society. Vol. I. John C. Peters, M.D. Editor. New York: W. Wood & Co., 1876. 8vo, pp. 272.

Although the New York Pathological Society has been in active existence since 1844, and has during the past twenty years ranked as the foremost medical organization of the country, it has not, until the present year, fulfilled the oft-expressed determination of publishing its transactions in book-form. In view of the immense amount of material which has been accumulated by the faithful and accurate reports of the various secretaries, it was, after much deliberation, decided to base the present volume upon the proceedings of 1875, and supplement the reports of the various cases with similar ones which had been recorded since 1844. Dr. Francis Delafield was the first editor appointed. This gentleman for several years labored successfully in arranging the vast quantity of manuscript material, and on his resignation Dr. John C. Peters was appointed to the office, when these labors were continued with a zeal and purpose which have so happily culminated in the present volume.

The arrangement is purely an anatomical one, and will be acknowledged to be the best that could be made. After giving a very interesting account of the origin and rise of the Society, a list of the specimens of 1875 is presented. Following this, the specimens bearing upon diseases of the nervous system are reported, then those of the organs of respiration, circulation, and digestion, making altogether the most valuable and varied contribution to pathology that was ever before collected in a volume of its size. The reports are admirably condensed by the editor, and his notes upon the different pathological conditions are singularly judicious and extremely valuable. Representing as this does the opinions and experience of the leading pathologists of New York upon the different morbid conditions presented, the work cannot fail to interest every practitioner, and be of special value to every earnest and progressive student. Some of the cases related are almost unique, many are exceedingly rare, and all are worthy of permanent record.

While speaking of the general plan of the work, we must not omit reference to two very valuable and exhaustive tabular statements representing the experience of the Society in aneurisms of the aorta and in cancer of the stomach. The first was arranged by Dr. F. Delafield, and includes eighty-four cases; the second by Dr. Bradford S. Thompson, and comprises fifty-five cases. The great satisfaction afforded by the consultation of these tables causes us to wish that there were more of them.

Dr. Peters informs us that the present volume embraces only one-half of the specimens presented during 1875, and that another volume will be required to complete it. Now that a proper initiative is taken by the Society, it is to be hoped that the good work will go on, and that the profession will be favored with equally valuable and interesting volumes as time and circumstance may admit.

Observations on the Diseases of the Rectum. By T. B. Curling, F.R.S.; Consulting Surgeon to the London Hospital, etc. 4th edition revised and enlarged. Lindsay & Blakiston, 1876. 8vo, pp. 244.

The reputation of this work as a practical guide to the surgeon is so well established that it is only necessary to say that the fourth edition is fully equal to any o

its predecessors. The whole volume bears evidence of a very thorough revision; and an entirely new chapter on Colotomy in Congenital Imperfections of the Anus and Rectum is added.

Clinical Studies of Disease in Children. By Eustace Smith, M.D. (Lond.), Fellow of the Royal College of Physicians, etc. Philadelphia: Lindsay & Blakiston, 1876. 12mo, pp. 291.

This little volume is a clinical study of the principal respiratory diseases of children, including acute tuberculosis as it affects the head, chest, and peritoneum. Typical cases are selected and given in detail, with interesting clinical and pathological comments. The first chapter, which is of an introductory character, gives a very succinct and interesting general account of the peculiarities of these diseases in children, following which are chapters devoted respectively to the following topics: Collapse of the lung (post natal atelectasis), croupous pneumonia, pleurisy, acute catarrhal pneumonia, chronic catarrhal pneumonia, fibroid induration of the lung, acute general tuberculosis, acute tuberculosis of the pia mater and tubercular hydrocephalus, and tubercular peritonitis.

As a whole, the work is one of the most valuable contributions to the particular class of infantile diseases of which it treats, to be found in any language.

Atlas of Skin Diseases. By Louis A. Duhring, M.D. Philadelphia: J. B. Lippincott & Co. 1876.

The object of the author of this atlas is to present faithful illustrations of the more common forms of skin affections such as are generally met with in practice, and to delineate as fully as the number of plates —about forty-eight in all—will allow, the phases and varieties of these affections. It will be therefore seen that the work will be of great practical value, as it will afford the opportunity which is usually given to but few, of obtaining a clear knowledge of the diagnostic features of these diseases, which are not as fully understood as they should be. Much of the want of success in the treatment of these affections on the part of the general practitioner, is due to his want of familiarity with them clinically, and the result is that in despair he often declines to adopt any treatment. We think that within the limits of the atlas, as proposed by Dr. Duhring, he will be able to present the appearances of the diseases generally met with, and that from them a clear idea of skin affections generally can be obtained when supplemented by further study and reading. Another important feature of this atlas consists in the fact that diseases as seen in this country only will be portrayed, as it is well known that their general *ensemble* varies within certain limits in different countries. Taking then the fact that the accomplished author proposes to give us illustrations of the more frequent diseases in their varying stages and phases as seen in this country, that they shall be strictly true to nature rather than in part imaginary or diagrammatic, we think that a very decided want will be admirably supplied. Each plate will be accompanied by descriptive letterpress, fully explaining the clinical features shown as well as by directions for treatment. As the present may be judged as a sample, we think the literary part of the work is decidedly valuable. The clinical histories and descriptions are clearly and tersely stated, while the directions for treatment are simple and very satisfactory. In the present fasciculus we have four plates, illustrating erythematous eczema, erythematous lupus, pustular syphilide, and psoriasis. They are of quite uniform merit, though two we think are exceptionally good, namely, the lupus erythematosus and pustular syphilide. Placed in a good light at a short distance from the observer, these plates present appearances nearly like life, and we repeat that their careful study will be very beneficial. We observe in them that the peculiar normal color of the skin is very well imitated, whereas in many of the foreign dermatological plates it is by far too deep, even as representing Austrian skins. If any criticism is made against Dr. Duhring's effort, it is that the redness of the morbid skin is not the exact counterpart of nature. This is noticeable in the plate showing erythematous eczema, an affection well known to be one of the most difficult of illustration. The artists, Messrs. Faber and Moras, have already acquired a deservedly high reputation in this class of work, and we think that Dr. Duhring is fortunate in obtaining their services. We shall look forward with pleasure to the appearance of the succeeding parts, which are to appear quarterly with regularity, knowing that the skill of the author will be again seen in supplying such illustrations as are most needed.

An Introduction to Pathology and Morbid Anatomy. By T. Henry Green, M.D., London. H. C. Lea, Philadelphia. 1876.

We have already reviewed at length this valuable work, and shall now briefly speak of some of the additions in this, the second American from the third London edition. That there was a decided want, owing to the rapid strides made of late years in pathology and morbid anatomy, of a practical and not too large a work on this subject, is well shown by the success obtained by this one. In it we find the various morbid processes carefully described, with an absence of technical details of a confusing nature, and in this point the work is superior to some similar German ones. Inflammation, nutrition, and degeneration are treated of at sufficient length with much clearness. The new formations and tumors also are in general described in a simple and intelligible manner. In this edition the chapter on epithelioma is notably enlarged. Though there is much uniformity of merit of all the chapters, we look upon those relating to the cell, to the changes induced by syphilis, to inflammation of connective tissue, as being very satisfactory. The various inflammations of structures and tissues are carefully treated of, and many illustrations are given. In this edition we find a good chapter on Hodgkin's disease, and that the one on inflammations of the kidneys has been amplified, making a very readable and useful chapter. The work is certainly a peculiarly valuable one, giving as it does in short space the essentials of the subject. It is handsomely gotten up by the American publisher.

Étude sur la Valeur Sémiologique de l'Ecthyma. By Paul Muselier, M.D. Paris: 1876.

In this little work the author gives the results of his studies into the etiology of ecthyma, conducted under the supervision of Prof. Hardy, at Hôpital St. Louis of France. The following conclusions are of interest, and contain essentially the pith of the work:

1st. Ecthyma is an affection rarely idiopathic, almost always secondary.

2d. Acute ecthyma results generally from local causes. It is one of the most frequent and important symptoms of the parasitic diseases.

3d. Chronic ecthyma is due sometimes to external causes, but it is connected always with general causes. The first play the rôle of occasional causes, the others that of predisposing.

4th. Chronic ecthyma is a frequent complication in all conditions of cachexia, chronic diseases, adynamic fevers, debility from bad hygiene. It may develop itself as a critical symptom, or in the course of certain affections of the nervous system.

5th. Ecthyma is one of the most serious cutaneous manifestations of syphilis, its gravity being subordinated to the character of the ulceration, which is only found in those profoundly affected with syphilis, or by bad intercurrent conditions. The supervention of a cachectic condition has a marked influence upon the development and course of syphilitic ecthyma.

THE ANATOMY OF THE HEAD, with Six Lithographic Plates representing frozen Sections of the Head. By THOMAS DWIGHT, M.D., etc. Boston: Hurd, Hough ton & Co. 1876.

DR. DWIGHT has followed the example of Braune in studying anatomy by frozen sections, which are valuable as demonstrations of the relation of parts which dissection generally fails to make clear.

While the neat little volume is not one to be read hurriedly through, it contains a great deal of valuable information in an attractive form for reference, and certainly fills a place in medical literature which has been unoccupied.

The author gives his reasons for producing the book, in his preface, as follows: "Knowledge of anatomy may be compared to that of a city. Many can enumerate the streets crossing the great thoroughfares, can even draw pretty accurate diagrams of the main streets and squares, but be absolutely ignorant of the direction of distant places from one another, and consequently of the short cuts between them, and what is to be encountered on the way. One who knows all this may be said to know the city, and he who can tell what a rod thrust through any part of the body will strike, knows anatomy in its most practical aspect."

Dr. Dwight has made his subject much more attractive and less obscure than it has heretofore been, and he deserves the thanks of all studious medical men.

THE BOOK OF THE BALANCE OF WISDOM, etc. By H. CARRINGTON BOLTON, Ph. D. (Reprint from the American Chemist, May, 1876.) Pp. 30.

THIS pamphlet consists principally of selections from early Arabian writings, and shows that the Arabic philosophers, during and prior to the twelfth century, possessed very great skill in the use of the *balance* and in the determination of *specific gravities*.

LIFE: WHAT DO WE KNOW ABOUT IT? By H. A. JOHNSON, A.M., M.D. Chicago, 1876. Pp. 39.

THE author objects to the positions of Huxley, Tyndall, and other physicists who are studying the metaphysical, and concludes that neither he nor they know much about the matter.

ARGUMENT IN FAVOR OF A CONTAGIOUS DISEASES ACT, etc. By E. T. EASLEY, A.M., M.D. (Reprint from the Rich. and Louisv. Med. Jour. Oct. 1876.) Pp. 32.

AN admirable essay upon the subject, and filled with propositions the truth of which is well recognized by the profession, and which, if conceded by the laity, would lead to speedy legislative action.

THE USE OF THE SPECTROSCOPE. By EMIL ROSENBURG, M.D. (Stevens Triennial Prize Essay.) New York, 1876. G. P. Putnam's Sons. Pp. 68.

THIS essay contains a description of the spectroscope and the method of using it, and chapters upon the characters of the emission and absorption spectra, more particularly of blood, bile and urine, normal and morbid. The medico-legal relations of the subject are also considered. It is decidedly the best contribution (in the English language) to the subject of spectroscopy, so far as it relates to matters of interest to the physiologist and physician, that has yet appeared.

MICRO-PHOTOGRAPHS IN HISTOLOGY. By CARL SEILER, M.D. Parts III., IV. and V. Philadelphia: J. H. Coates & Co.

As in previous issues, some of the plates are good, others are wretched. Plate XV. of blood-corpuscles of man and of the ox is a valuable contribution to the question that is just now agitating the minds of Drs. Richardson and Woodward; the former claiming that under certain circumstances it is possible to distinguish microscopically between the blood of man and certain mammals, while Dr. W. shows that under certain other circumstances this is impossible. Plate XXII., representing the kidney of a mouse, is capital; but the work as a whole is not what it should be, and does not fairly represent American photo-micrographic capabilities.

A SYNOPSIS OF DERMATOLOGY. Compiled by F. M. BLODGETT, M.D. Boston: James Campbell. 1876.

THIS is a chart containing Hebra's and Piffard's classifications; White's statistics of cutaneous diseases in Boston; profile drawings of the principal skin lesions, after Piffard; and the usual seats of disease, according to Tilbury Fox. The chart will prove of value to the student, as it gives him at a glance much useful elementary information.

A TREATISE ON THE THEORY AND PRACTICE OF MEDICINE, by JOHN SYER BRISTOWE, M.D. Lond., F.R.C.P.; Physician to St. Thomas's Hospital, etc., etc. Edited, with Notes, by James H. Hutchinson, M.D., one of the attending Physicians to the Pennsylvania Hospital, etc. Philadelphia: H. C. Lea. 1876. 8vo, pp. 1089.

THE number of new books on the practice of medicine is getting to be so great, and the facts which they contain are generally so well established, that it is quite difficult for the reviewer to point out any very distinctive characteristics. So few authors in this department of medicine have any original views to offer, that their works cannot be distinguished in that particular from the general run of ordinary treatises. We can say, perhaps, in summing up the whole matter, that because such works are up to the times, are ordinarily comprehensive in scope, that they are to serve a useful purpose. How an ordinary student can satisfy himself which is the one which will best suit his necessities is a very difficult question to decide. We must admit that each author has his peculiarities of presentation of his subject, method of arrangement, in fact system of teaching, which can only be referred to in general terms. In the present instance the notable feature of the work before us is its extraordinary scope of subjects, putting one in mind of times gone by, when medicine was divided into two great departments—that of medicine proper, and surgery; that what could not be comprised in the latter must find a place in the former. In this respect this work may be considered as a type of an encyclopædal manual for the guide of the practitioner, who must forsooth content himself with one book on practice in which every disease which he is liable to meet is described and treated. Considering the size of the work, granting what has already been said of its scope, the reader will be prepared to expect great conciseness, and will not be disappointed.

THE PHYSICIAN'S VISITING LIST for 1877. Philadelphia: Lindsay & Blakiston. 1877.

As frequently said on former occasions, this list has the two great advantages of simplicity and convenience, which must always maintain its place as a favorite.

Reports of Societies.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, December 11, 1876.

DR. JOHN C. PETERS, PRESIDENT, IN THE CHAIR.

THE PROPER TREATMENT FOR LACERATION OF THE CERVIX UTERI.

DR. EMMET'S paper being before the Society for discussion (*vid.* page 823).

DR. FORDYCE BARKER remarked that when Dr. Emmet read his first paper upon the subject under consideration, although he could recognize the condition described, and had the fullest faith in the truth and accuracy of the statement made, he was not able to understand it sufficiently to accept the views which the author of the paper then presented. Since that time he had become a convert to Dr. Emmet's views upon the subject, and had come to regard his contribution as one of great importance to gynecology.

Special reference was made to a case which Dr. Emmet had given him the opportunity to see, in which the uterus measured five inches, with a cervix very much enlarged, and presenting the angry, eroded, patulous, everted appearance precisely as described in the paper. The preparatory treatment was thoroughly carried out, the operation performed, and, having since had the opportunity of making an examination, he had found the uterus to measure only 2½ inches, and the cervix presented the appearance of that of the nulliparous woman. That such would be the result when the treatment, preparatory, operative, and subsequent, was carried out with the carefulness of detail insisted upon by Dr. Emmet, there was no doubt. In the instance referred to, the cervix presented no appearance of having been subjected to an operation.

With reference to cicatrices which resulted from the operation, Dr. Barker believed that they would entirely disappear in most cases, while the cicatricial tissue which resulted from the effort nature made to effect a recovery remained indurated, and became a serious disturbing element in the subsequent history of the case.

It was maintained that this peculiarity would enable the examiner to determine whether the laceration, if cured, had been cured by an operation or by spontaneous union.

Dr. Barker further remarked that he had seen but few cases of laceration of the cervix in later years, and explained that fact upon the ground that those who were in the better condition in society had competent obstetrical attendants during the time of parturition and throughout the puerperal period. Those not in a social condition to obtain such attention, as a general thing, arose from their beds too early after confinement, and the result was that spontaneous union of the laceration, if it was to occur, was prevented, and the general disturbance to which it gave rise soon followed. It was for that reason the injury was more commonly seen in the poorer class of patients.

Dr. Barker was not quite certain as to whether Dr. Emmet believed the arrest of involution and the subsequent erosion, version of the uterus, etc., were primarily due to laceration of the cervix, or whether it was the subinvolution which prevented spontaneous union of the laceration, the laceration not necessarily bearing the relation of cause to all the other conditions developed.

He believed that laceration took place and even became perfect during the puerperal period; for when the woman was kept in bed the parts were placed in a favorable position for coaptation of the edges of the wound, and the weight of the organ did not give rise to eversion of the cervix and prevent union.

Reference was then made to cases which formerly came under his care in Bellevue Hospital, and in which the uterus was found increased in size, displaced as a matter of course, cervix eroded, eversion was not recognized—in short, the cervix presented the appearance described by Dr. Emmet in his paper; but the patients were relieved by treatment, and passed from under observation. It was a noticeable fact, however, that those patients returned, and would pass through the same course of treatment, or essentially the same, and go out again. Those cases were cured most commonly by the use of the actual cautery. The actual cautery entirely destroyed the condition described as cystic degeneration of the mucous follicles of the cervix. None of the caustics in ordinary use seemed to affect these to any great extent; but the actual cautery so destroyed them and modified the nutrition of the parts that their cure was effected. It was formerly urged as an objection to the use of the actual cautery that it would leave behind it cicatricial tissue, which might interfere with the process of parturition. That result Dr. Barker had never seen, but, on the contrary, he had seen just the opposite state of affairs, and related a case in which the actual cautery had been used freely, and in a subsequent labor the child was born before the obstetrician arrived.

The former papers read by Dr. Emmet had been of great service in calling attention to the effects produced upon the nervous system in consequence of the contraction of cicatricial tissue upon and about the cervix uteri and at other situations upon the genito-urinary organs of the female. That fact was one now commonly recognized; but Dr. Barker had not seen it referred to, that cicatricial tissue, after an operation, was absorbed; hence, gave no rise to subsequent trouble. He had seen cicatricial tissue left as the result of improper use of caustics.

With regard to the success of the operation performed by Dr. Emmet, it depended entirely upon carrying out fully the *minor details* of the preparatory treatment, of the operation itself, and of the subsequent treatment.

DR. PEASLEE, in alluding to some of the reasons for the operation, called attention to the noticeable fact that, if but one laceration was present, it was almost always upon the left side. That fact was explained by reason of the greater frequency with which the fœtus presented in the first position, consequently a greater strain was brought upon that portion of the os uteri. Laceration of the cervix occurred occasionally upon the right side alone, and the probable explanation was, that the second instead of the first position was occupied by the presenting part of the child.

With regard to diagnosis, if the laceration was upon one side only, perhaps was originally double, and had healed upon the right side, unless one was familiar with the appearance presented by the parts, it was not easy to make out. On that account many cases escaped attention. Dr. Peaslee maintained that the number of cases was great beyond all conception, except to him who had given special attention to that

class of affections. Until very recently the exact condition had not been recognized at all, and the first recognition, or at least the first description, was given by Dr. Emmet. There were many eminent gynecologists, and even eminent authors, who did not yet know what the cases were. Did they fully understand them, they would not speak of a peculiar kind of ulceration which results from parturition. No author had a right, in the light of the knowledge now within reach, to speak in such an indefinite manner of any class of cases, but especially of that class which had been so clearly described by Dr. Emmet.

With regard to frequency, he could say that scarcely a case of ruptured perineum occurred without laceration of the cervix, and probably from one side to the other. Sometimes such laceration occurred without any laceration at all of the perineum.

Why had not this class of cases been found out before? It was probably because the injury had interfered with involution, and the case had seemed to be one of hypertrophy; that is, there had seemed to be only an actual increase in size of the cervix, and the os had been found to be of a peculiar shape and size with two surfaces, one in front and the other behind, covered with enlarged papillæ, called granulations, and presenting that red, angry looking appearance. The cervix, however, was all there, and when turned up it would be found that those angry-looking surfaces were nothing more nor less than the lining membrane belonging originally to the internal surface of the canal of the cervix.

Why did the operation become necessary?

In the first place, a laceration up to the vaginal junction prevented complete involution in a majority of cases, because the two lips of the wound became separated entirely, and the cervical canal became so far everted that constant irritation of the surfaces was kept up, which sustained a continuous congestion of the uterus, and rendered farther involution impossible.

But not every case had associated with it subinvolution of the uterus, the uterine cavity being too long and too large; but the cervix alone might be affected. If there was double laceration and either side had healed spontaneously, hypertrophy of the cervix would remain. There was not only an erosion of the surfaces of the flaps, but a growth of the anterior and posterior lips.

The laceration, then, not only arrested the process of involution, but gradually produced hypertrophy of the cervix, and it was in addition one of the most certain causes of sterility. For the removal of the latter condition the operation was a proper one to be performed. But there were cases, as well, which required the operation even after the menopause. When the laceration had healed upon one side, it did not interfere so much with involution, but it would interfere with pregnancy.

With regard to the operation itself, there were, as a rule, no traces of it left. Uterine tissue, in common with all unvoluntary muscular fibre, healed more rapidly than any other tissue, and the appearance of the cervix after the operation was almost perfectly normal.

Dr. Peaslee then referred to a case in which the cervix measured seven inches in circumference before the operation, but at the end of three months presented an appearance almost entirely normal. With regard to the sutures he had commonly permitted them to remain more than a week, and had had no difficulty in removing them without affecting the union of the parts. By taking deep sutures it was believed to be safe to leave them sufficiently long to allow adhesion to become so firm that their removal could be effected without endangering the union of the flaps.

Dr. Pallen believed that laceration of the cervix was very frequent, full forty per cent. of the cases at the clinic at the University Medical College presenting that lesion. He regarded the diagnosis as easy by the touch alone; and when the patient was placed upon the left side, a Sims speculum employed, and the parts raised with a tenaculum, the fissure could be readily recognized. Coaptation of the torn surfaces by means of sutures was held to be the best method of treatment, either for immediate relief or as a subsequent operation. Cure without surgical procedure was regarded as rare; and the operation rarely, if ever, failed to bring about the integrity of the cervix. Dr. Pallen had performed the operation during the past ten years substantially as Dr. Emmet had recommended, and read extracts from papers in illustration of the views he held at the beginning of that period.

Dr. Downs raised the question whether occlusion of the os might not occur as the result of spontaneous or operative closure of the flaps of a lacerated cervix, and cited a case which seemed to him to illustrate that possibility.

Dr. Mundé presented some statistics regarding the frequency of laceration of the cervix. Out of 490 uterine cases treated by him at Mount Sinai Hospital there were 28 in which complete laceration, bilateral or otherwise, had occurred, or $5\frac{5}{7}$ per cent. That was a smaller percentage than Dr. Hanks had reported from Demilt Dispensary, or $8\frac{4}{10}$ per cent., and considerably less than mentioned by Dr. Pallen. Of those 28 cases, 23 were bilateral, 4 unilateral, and 1 posterior. Sixteen were attended with endo-cervicitis or metritis, and there was usually subinvolution or hyperplasia. Eleven were connected with displacement or hyperplasia, with uterine catarrh. One case exhibited no uterine symptoms whatever, and no other disease of the uterus. The more eversion there was present, the more marked were the symptoms. In some cases there was no eversion, but simply laceration, and yet there was present considerable endo-cervicitis. He had also found that when treated by ordinary local measures, without operation, they would get better, and remain away for a time, but return with the same trouble as bad as ever.

Dr. Hanks remarked that one point should perhaps be made more prominent, and that was with reference to cicatricial tissue remaining after the operation. He was of the opinion that it was a peculiarity of the operation that no cicatricial tissue remained, and cited a case in which labor had subsequently occurred without the slightest difficulty, and was effected without laceration being reproduced. Dr. Hanks also drew attention to the use of a double tenaculum for holding the lips of the wound together, thus permitting of the more easy introduction of the sutures by less skilful hands than Dr. Emmet's.

Dr. Chamberlain referred to the fact that he had failed for a long time to recognize the lesion, although constantly seeing cases in which it was present. The reason for not recognizing the condition he attributed to the fact that he used the Ferguson speculum, by which it was obscured. By the use of the Sims speculum, or its equivalent, he had been able to detect its existence when unable to recognize it by means of the Ferguson instrument.

Dr. Gillette regarded the diagnosis as very simple, and the mechanical operation as one easily performed. His first operations had been failures because of insufficient instruction concerning preparatory treatment.

The degree of displacement, the cystic degeneration of the tissues, and the congested condition, were not fully considered by him formerly, hence failure followed his operations. That had been the experience of others, and probably such experience had been due to an equally insufficient knowledge as possessed by himself.

Dr. Otis remarked that for several years he had had opportunity of observing the results following the division of cicatricial tissue in canals of similar character, especially the urethra, and had found it to be an invariable result that, when the constriction was thoroughly divided, the cicatricial tissue was entirely absorbed. He had also observed that where division had been made across the urethra, the same result did not follow. In order to produce stricture the injury must extend around the canal, which it did not do where the incision was made longitudinally. In such case the cicatricial deposit had no hold around the canal, but the contraction was upon the cicatricial tissue itself, and it was finally able to disappear; whereas, if the plastic deposit had surrounded the canal, the contraction took place at the expense of the canal.

Dr. Wylie remarked that he had had the opportunity of observing the results which had followed closing of laceration of the cervix by means of sutures, at the Woman's Hospital, and had not seen any subquent bad results. It had seemed that the condition was not yet recognized by some eminent gynecologists, for a case had come under his observation which had been regarded by several gentlemen in Philadelphia as one of cancer of the cervix, but which, after careful examination, was recognized as one of simple laceration, and completely cured by an operation performed by Dr. Emmet.

The Society then adjourned.

Correspondence.

A NEW METHOD OF ADMINISTERING QUININE.

To the Editor of The Medical Record.

Allow me to say a few words recommending a new medicine to our already long list.

In the October number of the *American Journal of Medical Sciences* of the present year is an article by Fothergill, of London, recommending the hydrobromic acid. Among other properties he speaks of it as a solvent for quinine and a preventive of the head symptoms resulting from the use of quinine.

We had a patient in the hospital with chronic malaria, who could not take quinine for any length of time without being "almost crazy from it," as she expressed herself, and at the suggestion of Dr. Burrall, the visiting physician, we tested the acid on this case.

It was given in ℥ ss. doses, with quinine in capsules, and with the happiest result. The roaring in the ears and the dizziness disappeared, and the patient no longer objected to being cured by quinine.

Since then, I have tested the medicine in many cases, and it has never failed. Dr. H., of Washington, D. C., entered the hospital suffering from malarial poisoning and from large doses of quinine, and was much pleased at being relieved from the cinchonism by the acid. The tinnitus aurium following the exhibition of quinine seems to be due to an active congestion of at least some parts, if not the whole of the brain, as Dr. D. B St. J. Roosa has observed that after taking ten or fifteen grains of quinine the membrana tympani and malleus are markedly injected. It had before been noticed that the administration of quinine aggravated the symptoms of otitis media and other aural affections.

It may be that hydrobromic acid, being analogous to bromide of potassium, may, like bromide of potassium, cause contraction of the blood-vessels, and thus prevent the bad effects of quinine. However this may be, it acts in the happiest manner.

There is a growing mistrust among the laity towards quinine. All sorts of stories are reported concerning its harmful effects, such as causing permanent deafness, impairing the eyesight, affecting the brain, etc., etc. Nor are these opinions wholly without reason, for the roaring in the ears, the dizziness, the trembling limbs, the sensation of being in a storm at sea generally, is anything but pleasant and reassuring to a person distrustful of "allopathy." It is then the duty of the profession to keep our faithful ally quinine from falling into disrepute when it can be done by so simple a means as the use of this acid.

In giving quinine in solution, I use the following formula:

℞. Quinine sulph. . . . . ℥ j.
Hydrobromic acid,
Aquæ. . . . . āā ℥ iss.
M. Sig.—Two teaspoonfuls contain five grains of quinine.

You can insert the formula for making the acid according to Fothergill, if you see fit.

Dissolve ℥ x., ℥ vj., grs. xxviij. of potassæ bromidi in water Oiv., add ℥ xiij., ℥ i., grs. xxxvij. of tartaric acid. The *acid remains in solution*, and potassa bitartrate is precipitated.

W. E. Forrest, M.D.,
Resident Physician, Presbyterian Hospital.

ANTISEPTIC OVARIOTOMY.

To the Editor of The Medical Record.

My dear Sir:—In the number of the Record for Dec. 9, 1876, I find a case of ovariotomy reported by J. Marion Sims, M.D., in which "Lister's antiseptic method" was employed.

I desire to call attention to the following quotation from that article. The italics are my own. "The operation was done on Thursday, *the 23d November last. I am particular in fixing the date, because I believe it inaugurates a new departure in ovariotomy.*"

From a perusal of this and the context, the inference to be drawn is, that the 23d day of November, 1876, marked the *first* employment of "Lister's antiseptic method" in the performance of ovariotomy.

I take the liberty of forwarding to you an extract from a report of my own, published in the *Homœopathic Times* for November, 1876, bearing this title: "Successful Ovariotomy — Antiseptic Treatment," which, I think, may place the date of the employment of "Lister's method" in ovariotomy, six months prior to the date mentioned in the article of Dr. Sims.

After some general remarks on the condition of the patient and the history of the case, the article reads:

"On May 24th I proceeded to remove the tumor, which was unilocular.

"*Having had the apartment thoroughly aired, the atmosphere of the room was charged with carbolic acid spray*—from a solution in the proportion of about one part of the acid to fifty of water. *The table was also sprayed, and my hands washed in a carbolic acid solution.* She was brought under the anæsthetic without

trouble. An incision, not more than two and a half inches in length, was made in the linea alba, and the tumor exposed. The fluid drawn off was dark brown in color, with flocculi here and there deposited through it. The adhesions were quite numerous, but *not* dense, and the vessels were secured by torsion *and Lister's antiseptic animal ligatures*, the ends being cut off close, and returned to the abdominal cavity. The pedicle, which was broad, was tied *with a strong animal ligature*, passed double through its centre, and secured on both sides. The écraseur was then applied, and the pedicle severed. The ends of the ligature were cut close, and the stump dropped back into the abdomen. *The parts were sprayed constantly with carbolic acid, and the sponges used were soaked in a solution of* $\frac{1}{20}$ *proportion of acid.* Silver wire sutures were employed to close the wound, and the patient put to bed after a compress saturated *with carbolic acid solution had been applied, and a bandage placed around the abdomen.*"

This patient recovered without a single untoward symptom, and the tumor weighed about 23 lbs. The ligatures used for the pedicle and to arrest the hemorrhage were prepared by J. H. McFarlan & Co.,' London, after Lister's formula. I might here also mention that on the 18th of March, nearly two months before the operation just mentioned, I removed a remarkable dermoid cyst, containing teeth, bones of various and peculiar shape, tufts of hair, quantities of lime and colloid substance, in which operation the antiseptic method was used, not, however, in so thorough a manner as in the case quoted. In the latter the parts were sprayed before and after the operation, and my hands dipped in artificial serum impregnated with carbolic acid. The pedicle was ligated as were the vessels—which were numerous—with Lister's carbolized catgut. The patient died on the fifth day. At the post-mortem examination the condition of the pedicle and vessels was so satisfactory, that I believe ere long, that clamp twine, or wire, will be cast aside, and antiseptic animal ligatures be used entirely in the treatment of the pedicle.

Very truly yours,

WM. TOD HELMUTH.

21 West Thirty-seventh Street, New York,
Dec. 9, 1876.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from Dec. 10th to Dec. 16th, 1876.

COOPER, GEO. E., Major and Surgeon. Appointed Assistant Medical Purveyor, with the rank of Lieutenant-Colonel, to date from Dec. 2, 1876; *vice* Laub, deceased.

BILLINGS, J. S., Asst.-Surgeon. Promoted Surgeon, with the rank of Major, to date from Dec. 2, 1876; *vice* Cooper, appointed Asst. Medical Purveyor.

EXPECTANT TREATMENT OF CHOREA.—Doctors E. B. Gray and H. M. Tuckwell gave, some five years ago, a series of cases treated in this manner. They now present twenty more cases where they were treated in isolated wards, had good nursing, large and well-padded cribs, plenty of nutritious food, but no stimulants. The average duration of these twenty cases of chorea was a little over nine weeks. The doctors are inclined to rely upon this treatment till more conclusive evidence can be obtained that the disease is in the slightest degree favorably influenced by medicines. —*The Lancet*, November 18, 1876.

Medical Items and News.

CONTAGIOUS DISEASES.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending December 16, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Dec. 9.....	0	11	49	1	3	68	4
" 16.....	0	10	71	2	4	61	1

MUTUAL DISSECTION.—A society has been formed in Paris, having for the object the dissection of deceased members by the survivors. The youngest member will doubtless have excellent facilities for the study of practical anatomy at a nominal price.

MEDICAL SUPERVISION IN SCHOOLS.—The *Cincinnati Lancet and Observer*, in commenting upon our recent editorial, very properly says: "It would be a wise action on the part of every Board of Education in large cities to appoint a committee to report upon the advisability of appointing a medical inspection of schools."

CHICAGO is in a bad way in consequence of an inefficient Health Board, at least so we learn from an editorial in the last issue of the *Chicago Medical Examiner*.

LADY VISITORS TO MEDICAL SOCIETIES.—The Medical Society of London declines, by vote, to admit lady (medical) visitors to its meetings.

MIASMATIC ALGÆ.—MM. Lanzi and G. Terrigi have published at Rome an account of observations on the microscopic fauna and flora of the marshes in the Campagna, and endeavor to show that there is a connection between the product of changes in the cells of certain algæ and the cause of malarial fever. Dark granules form in the cells, which at last they fill, and then the algæ rot. They cultivated the plants in an aquarium, and followed the process in all its stages. The algæ develop in the marshes which are formed in winter and spring. When the moisture disappears under the heat of summer, the surface of the ground is left covered by a layer of stinking algæ. The same conditions are found, although not to the same extent, even where there are no marshes, the uncultivated ground being covered more or less with putrefying vegetable matter. The authors believe that the dark granules act as a ferment. They are found in the atmospheric dust of the Campagna, from which they can be developed abundantly by cultivation. Lanzi believes that they are identical with the pigmented sphærobacteria of Cohn and the bacteridium brunneum of Schroetter. The authors assert that the pigment-granules found in the liver and spleen of persons who have suffered from malarial cachexia are similar to the granules from the algæ cells; and Lanzi affirms the identity of the malaria melanin of pathological anatomists with the granules which result from the decomposition of these plants. The germs were found in the atmosphere of the Campagna to a height of fifty centimetres above the surface of the marshy soil. Lanzi found abundantly malaria-melanin in the liver and spleen of guinea-pigs which had breathed for a considerable time air of the marshes which contained these organisms.—*British Medical Journal.*

Original Communications.

SELECTED CASES OF HYPERTROPHIED GLANDULAR TISSUE OF THE VAULT OF THE PHARYNX AND OTHER HYPERTROPHIED TISSUE OF THE NASAL PASSAGES,

WITH SYMPTOMS OF POST-NASAL AND NASAL CATARRH, CURED WITH THE GALVANO-CAUTERY; TOGETHER WITH REMARKS AND DESCRIPTION OF AN INSTRUMENT.

By R. P. LINCOLN, M.D.,

NEW YORK.

Miss C., aged twenty-one years, was referred to me for treatment, February, 1865. She was in good general health, of a nervous, vivacious disposition, and had inherited no unfavorable diserasia. Much time had been devoted to her musical education, especially vocal, in which exceptional proficiency had been attained.

For the past two years a hoarseness, attributed originally to a cold, has been a frequent and finally an almost constant cause of annoyance. At the same time a want of timbre in the head-notes was also observed, and a nasal character in ordinary enunciation. At first, efforts to clear the throat afforded temporary relief of the hoarseness, but in a short time the deadened consonant sounds were unvarying. To breathe through the nostrils required special attention, while at night it was only practicable to breathe through the open mouth. A disagreeable naso-pharyngeal discharge and an occasional hacking cough were also complained of.

On inspecting the pharynx, transparent mucus was found flowing from above, and its mucous membrane a little congested and thickened, greater above than below. A similar condition was exposed in the larynx by the mirror, and in addition, in the naso-pharyngeal space, an excessive hypertrophy of the adenoid tissue of the vault. This enlargement occluded at least three-fourths of the opening of the posterior nares, and was covered with tenacious mucus.

The anterior nares were also much obstructed by submucous thickening, especially over the inferior turbinated bones, and from them a ropy mucus was discharged.

Nothing abnormal existed in the lungs, and all other functions were well performed.

The patient had submitted to a great variety of treatment, both internal and local, without material benefit.

Treatment was advised as follows: destruction of the adenoid tissue by means of the galvano-cautery, and of the polypoid growths in the nostrils by chromic acid, and subsequently spray applications of astringent solutions to the naso-pharyngeal tract and interior of the larynx.

The use of the galvano-cautery was declined, and a trial of the chromic acid desired. Seven applications of the latter were made to the growths in the vault of the pharynx, and three to the enlargement in the anterior nares, at intervals of from three to five days.

The nasal thickening was thus thoroughly removed, but in the post-nasal region but little was accomplished, the tissue being unusually firm. My first recommendation was now yielded to, and three applications of the galvano-cautery, at intervals of a week, completely removed the remaining glandular tissue.

A few applications of a spray of tannin, glycerine and carbolic acid and water accomplished the removal of every evidence of disease, and relief of all the symptoms complained of.

Miss B., aged 14 years, a pupil in one of our public schools, was brought to me by her mother, November, 1875, who was much depressed because, as she said, of the growing stupidity of her daughter. The patient was found to have had more or less trouble with her throat since an attack of scarlet fever when two years of age. She now had a slight cough, or, more properly, was frequently compelled to clear her throat; but the principal cause of complaint was a defective enunciation; this was a source of annoyance to herself and trial to her teachers, which no amount of patient practice had been able to correct. Her general health was good, though she often suffered from sore throat. Her breathing was chiefly oral, yet there was no nasal catarrh complained of, and though the nose itself was apparently small, the nasal mucous membrane was normal in appearance.

On inspection through the mouth, both tonsils were found greatly enlarged, and on using the mirror the adenoid tissue of the vault was seen nearly to fill it; from the latter mucus was flowing down the pharynx, and caused the cough that was complained of.

Excision of the tonsils and the use of the galvano-cautery on the adenoid tissue were urged. The first was not permitted; their removal, however, was undertaken by means of Vienna paste, and accomplished after four applications to each gland at an interval of four or five days. Two applications with the galvano-cautery, with an interval of a week, completely removed the hypertrophied tissue above, and effected a complete cure.

James B., aged sixteen years, of French extraction and scrofulous diathesis, but fairly nourished, came under my care March, 1876. For more than four years he had been troubled by a naso-pharyngeal catarrh, and was very subject to sore throat and "colds." For the past year his trouble had become excessive, but as yet he had had no special treatment. Formerly a bright, intelligent lad, he had become mentally dull, and wore a characteristic stupid expression, and was looked upon by his teachers with pity and indulgence. His voice was dull, thick, and lacked flexibility, and his breathing almost entirely through his open mouth. The sense of smell had gradually disappeared, while that of hearing was so defective that the tick of my watch was heard only when held within an inch of either ear. On examining the nostrils they were found swollen, and from them poured a profuse muco-purulent discharge; the same conditions presented in the pharynx, while by means of the mirror, the naso-pharyngeal space was found quite filled by hypertrophied glandular tissue.

Both tympana were concave and dull, but readily restored temporarily by practising Politzer's method of inflation.

After removing the secretion from the adenoid tissue a thorough application was made to it with the galvano-cautery, and to the nostrils and pharynx a spray of a solution containing three grains chromic acid, ten grains bichromate of potash in an ounce of water. At the expiration of a week the galvano-cautery was again used as before, and at the same seance a galvano-cautery needle was introduced well into the infiltrated tissue in the nostrils. It was two weeks before the eschar had entirely come away and the wounds healed, but the defective enunciation and the embarrassed breathing were already corrected. Extending over a period of two weeks longer, at intervals of

about three days, applications of the spray and Politzer's method of inflation were practised, when the patient was discharged, cured of every evidence of disease in the naso-pharyngeal region.

The only internal treatment employed was during the last ten days, when, on account of a succession of boils, the following was prescribed:

℞. Potassii iodidi..... ʒ ss.
Ferri pyrophosphatis..... ʒ i.
Syrupi simplicis,
Aquæ..... āā ʒ ij.
M. Sig.—Take one teaspoonful after meals.

Remarks.—Since the invention of the rhinoscope, and Dr. Wm. Meyer's effort to direct the attention of the profession to the frequency of the hypertrophied glandular tissue in the posterior nasal region, its influence in producing organic and functional changes in the conditions and uses of the upper air-passages is acknowledged. Yet I doubt that the important part exercised by these growths in many cases of disease in the upper-air passages has received the consideration it deserves, and I am sustained in my belief by the frequency with which I have met these growths during the past eight years, and by the infrequency of references to them in medical periodicals and the brief notice of them in special works.

Dr. Wm. Meyer met with the disease 102 times in his private practice in the course of eighteen months; and of 2,000 pupils in the public schools of Copenhagen examined by him, 20 cases were discovered. Prof. Cohen has a reasonable doubt of the accuracy of Meyer's diagnosis, for he seems to have relied chiefly on digital exploration; his leading symptom—a sensation as of a bundle of earth-worms—being almost always suggested by the constriction upon the finger of the soft parts of this region by its muscles, may have been easily misinterpreted. At the same time it should be remembered that the climate of Copenhagen is probably more conducive to the development of this disease than our own. Whatever the verdict, the affection is not uncommon with us, and the above cases are reported not because they may be considered typical in their history, but chiefly to illustrate the success of treatment.

Formerly, in the management of these cases I relied on nitrate of silver, chromic acid, Vienna paste, or the curette, as prepared by Meyer; but two years ago devised an instrument by means of which I could conveniently use the galvano-cautery, and which has superseded in my practice the other methods when this is practical.

Its advantages are, its radical effectiveness, shortness of treatment—two or three applications being sufficient to remove the most extensive growths—and its comparative painlessness.

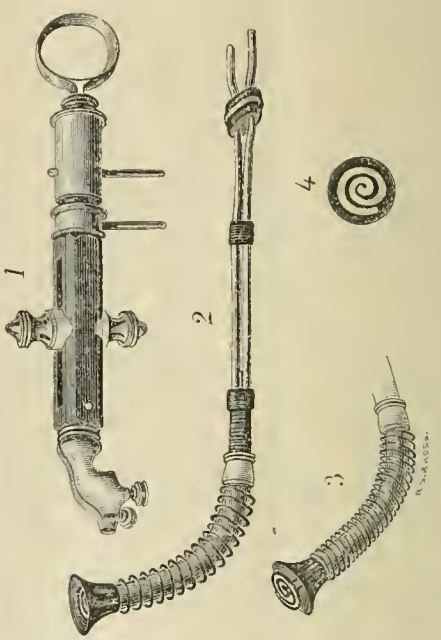
In respect to the latter feature, I can assert as a result of my experience in many cases, and as was testified to by the subject of the first case in this report, in the presence of several physicians who witnessed the operation, that there was less pain either immediately at or subsequent to the application than after the use of escharotics.

The only requisites are, the docility of the patient, and if an anæsthetic is permissible this is always secured, and a suitable battery and electrode.

In the last of the above cases, and in similar subsequent operations, I have made use of Dawson's battery, and have found it to fulfil every indication of a cautery battery.

The electrode used was made at my suggestion, for use in the naso-pharyngeal region in another affection, by Otto & Reynders, though afterwards somewhat modified. It consists of an addition to one of Leiter's electrodes, and used with his universal handle, all of which is figured herewith.

In some cases the shield described below may be dispensed with, either on account of the patient being able to avoid contraction of the palate during an operation, or when it can be controlled by some retractor, as the rubber cord suggested by Dr. Wales.



1. Leiter's universal handle.
2. Electrode, on which is fixed a spiral spring terminating in a shield of bone concealing a platina disk which terminates the electrode.
3. The same, with the disk disclosed by the recession of the shield when pressed against the tissues in the act of cauterization. The shield serves to protect the surrounding parts in case the instrument is grasped by them during an operation.
4. The disk in its relation with the shield.

The above figures are one-half the size of the original.

EDGEWISE DISLOCATION OF THE PATELLA.

By ALEXANDER N. DOUGHERTY, M.D.,

NEWARK, N. J.

This day, Dec 4, 1876, I was summoned to see a young man named Leonard, who, while working as a painter on the roof of a house, had met with a singular hurt about the knee.

I found him in the attic of the house where the accident occurred. The left lower extremity (the one involved) was in a state of extreme extension, and the patella was tilted up on its inner edge, the posterior surface of the bone looking directly outward, and the exterior tendon correspondingly tilted up and stretched. The patient seemed in great pain, which any attempt at reduction much augmented. I had him laid down on a bed, and after a few minutes of manipulation, during which he called loudly for chloroform, I succeeded in effecting reduction, which took place with an audible snap.

The manipulation consisted in depressing, with a joggling motion, the projecting edge towards the outer condyle. This failed at first, but after a few

trials proved effectual. The thigh was not flexed, as recommended by Gross.

The cause of the accident seemed to be a sudden wrench of the knee in turning the body while the foot was lodged in the gutter of the roof.

Gross speaks of his having encountered only thirteen recorded cases. Mine will make a fourteenth, unless he has seen others since the publication of his book—which is, by the way, in my judgment, the most complete and valuable treatise on surgery extant in any language. He says, p. 87, vol. ii.: "The reduction is generally extremely difficult, owing, apparently, to the trouble which is experienced in disengaging the bone from the sub-condyloid fossa where it is almost as firmly impacted as if it were screwed fast. On several occasions, indeed, the most violent efforts, conjoined with the division of the ligament of the patella, were hardly sufficient to accomplish the object. . . . . Fortunately, such measures are not likely to be again repeated, since experience has fully shown not only their utter inefficiency, but great danger.

"The proper method of reduction consists in flexing the thigh strongly upon the pelvis, and in bending the leg forcibly to the fullest extent upon the thigh, the limb being again immediately brought into a straight line, at the same time that an effort is made to push the bone strongly over towards the inner part of the joint."

He disapproves of the extended position of the limb in connection with efforts at reduction, but my case shows that it may answer equally well on occasion.

I ordered the use of an elastic cap; and next day I found my patient walking on the street so equipped, and suffering no inconvenience from his accident.

A CLINICAL CONTRIBUTION TO THE EFFECTS OF ACUTE BROMIZATION.

By GEORGE M. SCHWEIG, M.D.,
NEW YORK.

The remarks I have to offer are based chiefly, though not wholly, on observations made recently (April, 1876) in a case of morphine methomania, where I administered various salts of bromine in a manner that I shall presently describe. The deductions that I have drawn from the effects as observed, are borne out by similar, though less characteristic effects obtained in two other cases, to which I shall have occasion to recur hereinafter.

It would be foreign to the purpose of the present paper to give in full the history of the patients, or any more of it than may have a bearing on the effects to be considered.

Case. I.—Mr. S., æt. 42, married, came to consult me, March 24, 1876, accompanied by his attending physician. The object of his visit was to be cured of the morphia habit. As necessary to a proper appreciation of his then physical condition, I will state the following: He had been addicted to morphia for about seven years, during the last four of which he had used it hypodermically. The doses during this period had ranged from grm. .048 to .516 (¾ to 8 grains) per diem, and were for a short time as high as 1.0 (15½ grains). He had been twice at the Asylum in Binghamton; the last time (in 1875) for nearly four months; had obtained no relief. A brief forced abstinence had produced delirium and mania, followed by an increased consumption of the drug. The habit had been engendered by the therapeutic administration of morphia for the relief of gastralgia (probably hysterical). His condition, as when I first saw him, can be summed up in a few words. He had:

1. *Morphia methomania*, the average daily (hypodermic) consumption being .064 (one grain), taken in two doses.
2. *Hysteria*, its manifestations limited to the solar plexus.
3. Symptoms of the first stage of *locomotor ataxia*.
4. *Urethral stricture*.

After some preparatory treatment, such as dilating the stricture, administering tonics, etc., as also an unsuccessful attempt to decrease his daily allowance of morphia, the bromide treatment was instituted as follows: April 5th.—Bedtime, potass. bromid., grammes 2.0 (ʒ ss.). April 6th.—6 A.M., pot. bromid., 2.0; 7 A.M., 2.0; 7.30, being very restless, solut. Magend. ♏ v. hypoderm.; 2.0 pot. bromid. at 9.30 and 11 A.M., 12 M. and 12.30 P.M.; at 12.45, ♏ iij. Magend. sol., by skin; then resumed bromide as follows: 2.0 at 1, 1.35, 2.15, 3, 3.30, 4.30, 5.20, and 6.10 P.M. Then changed to bromide of sodium, of which 2.0 was given at 6.45. He now for the first time during the treatment began to show signs of somnolence. 7.15, sod. brom., 2.0; slept for three hours, when, at 10.20, dose was repeated. Slept to April 7th, 4.30 A.M., when treatment was resumed as follows: 2.0 sod. bromid., at 4.30, 5, 5.40 (very restless; 5 ♏ Magend. sol. by skin), and 7.10 A.M.; fell asleep shortly after last dose. Slept 5½ hours, when treatment was again resumed with 2.0 doses of the salt at 1.20, 2.20, 3.40, 4 (at 4.10, being very restless, received ♏ v. Magend. sol.), 4.30, 5, 5.30, and 7.30 P.M. Bromide of calcium was now substituted for the sodium, and given as follows: 10 P.M., 4.0 (ʒ i); 10.30, 2.0; same at 12, night. April 8th.—Pulse very feeble. At 12.15 A.M. administered a hypodermic of .00135 (gr. $\frac{1}{50}$) sulphate of strychnia; then continued the calcium bromide as follows: 2.0 at 12.15, 12.45, 1.15, 1.45, A.M.; 3.9 at 2.15 A.M.; very restless. At 2.30, Magend. sol. ♏ v.; 2.0 of the bromide at 2.45 and 3.15; at 3.30, ♏ v. Magend. sol.; then calc. bromid. 2.0 at 4.15, and 4.0 at 5.15 A.M.

This finished the bromides for the time being, and also the morphia. The patient had taken grm. 93.5 (ʒ iij.) of bromides in less than forty-eight hours, viz., from 6 A.M. of the 6th, to 5.15 A.M. of the 8th of April.

When, at about 8 A.M. of the 8th, I visited the patient, I found him in a profound comatose sleep. His condition was such that for some hours I feared for his life. It is foreign to the purpose of this paper to detail here the means I employed to arouse him during that day and the next. I will therefore proceed to enumerate, as observed, such of the phenomena presented as I consider directly attributable to the bromides. If in some respects my observations differ from those of other observers, this may be accounted for, firstly, by the well-known inconstancy of the bromide effects; second, and chiefly, by the relatively large quantities given, and the frequency of administration—in other words, the *rapid* bromination.

*Temperature.**—The thermometer in the rectum recorded 98° Fahrenheit. The normal temperature was reached in about three days, dating from the last dose of bromide.

Cardiac Action.—The pulse was very frequent, ranging from 100 to 140 for several days. It was, during the first few days, so excessively feeble, that at times the radial pulse was imperceptible, and the carotid almost so. It was rhythmical throughout.

The *capillary circulation* was exceedingly feeble; extremities cool, lips blue, etc.

Respiration was about normal in frequency, feeble, at times stertorous, and shallow throughout.

*My observations embrace the period of bromism.

The Urine.—There was *entire suppression* of this excretion for two days; for many days after there was a *very decided diminution.*

Defecation, after the first few days of general inertia, became normal.

Salivation remained a prominent symptom for about ten days. It was excessive. At times the saliva flowed from his mouth in an uninterrupted stream.

The *breath* for about two weeks remained intensely fetid; the *tongue* heavily coated.

Hunger and *thirst* appeared for some days extinct, only gradually reappearing.

Blepharoconjunctivitis was first noticed on the second day, accompanied by a moderately abundant muco-purulent secretion. It receded spontaneously in about a week.

The *pupils* were for some days *slightly* dilated.

There was throughout no *acne.*

I come now to consider phenomena more directly within the sphere of the nervous system.

Hypnosis.—The hypnotic effect was simply supreme. I have never seen any one so profoundly asleep as this patient. He may be said to have slept continuously for about four days and nights after the last dose of bromide had been administered. It was with great difficulty that he could be aroused during this period for even a moment, to fall back almost instantly into the same stupor as before. It was a full week before he was able to open his eyes properly, and even then the somniferous influence had not entirely ceased.

Sensation.—At a first glance it seemed as though this were entirely extinct. Shaking, pinching, etc., elicited no signs of cognition. The lethargy appeared to be perfect. On analyzing his condition in this respect by further experiment, however, I found that it was less impairment of sensation than an indifference and lebetude so profound as to preclude manifestations of consciousness of *slight* insults. The moment, therefore, that any *decidedly painful* irritation was presented, the patient evinced his consciousness of the insult by a short outcry and withdrawing the offended part. These manifestations, however, were only momentary, to give way as quickly to the previous state of torpor. They reminded one forcibly of the action of pigeons whose cerebrum has been extirpated. The major irritations alluded to, I accomplished by means of electricity, a prompt response being obtained to either galvanic or faradic currents of high tension.

As to the surface of the body, then, there were neither hyper- nor dysæsthesia, and only *seeming,* not *genuine,* anæsthesia. Of the conjunctiva and other accessible mucous membranes the same may be said, holding good, however, in a somewhat less degree.

Motion.—There were evinced during the entire bromism no signs whatever of paralysis or sub-paralysis. The only deviations from the normal that I was able to observe in this direction, were general paresis and disturbed co-ordination. These manifested themselves in every muscular effort. This was not observable for the first three or four days of the bromism, simply because during that time no muscular efforts were made. When vitality, however, had so far returned as to admit of his sitting up occasionally, the tottering gait, the feeble pressure of the hand, etc., etc., made the paresis sufficiently obvious; while the impairment of co-ordination manifested itself by inability to button his shirt or collar, to wipe his mouth or nose with a handkerchief, to convey food to his mouth, etc. It was fourteen days before he could write his name. Speech, for over a week so feeble and inco-ordinate as to be absolutely unintelligible, bore further evidence in both these directions.

The Special Senses.—I had no opportunity to make observations as to taste or smell. Sight was little impaired, if any. Of audition the same holds good that I have said above of general sensation.

The Mind.—By far the most important observations that I have to record are in this connection. From the time that bromism was completely established (the morning of April 8th), until the morning of April 22d —or fourteen days—Mr. S. was fairly demented. The alienation presented the form of "intellectual insanity." There were incoherency of speech and actions, hallucinations of sight and sound, delusions of varied nature, a general aspect of imbecility, and an almost entire absence of rational conduct in every respect. The maniacal and delirious elements were absent throughout. It is remarkable that, as physical strength returned, the mind still remained clouded, until, on the date above mentioned, and without any previous amelioration whatever in this respect, Mr. S. woke up perfectly sane. Subsequent inquiry elicited the very interesting circumstance, that *he not only recollected perfectly many occurrences that had taken place during the period of mental darkness, but had also formed a rational conception of them.*

This concludes my observations in this case. Before drawing deductions therefrom, I will briefly give a few observations made in the two other cases above referred to.

Case II.—This case was published in the New York Medical Journal for May, 1876, only, however, in its aspect as an instance of cure of the morphia habit, no reference being had to any of the effects of the bromides excepting their therapeutic action in the existing methomania. The patient took, from 6.30 P.M. of July 9th, 1875, to the evening of the 18th, or in nine days, about 160.0 (upwards of ℥ v.) bromides, as follows: July 9th, sod. bromid. 21.37; 10th, sod. bromid. 19.40 and calc. bromid. 25.25, together 44.65; 11th, sod. bromid. 3.0; 12th, sod. bromid. 21.37 and pot. bromid. 9.71, together 31.08; 13th, pot. bromid. 11.65; 14th, pot. bromid. 7.77; 15th, 7.77 each of sod. and potass. bromid, together 15.54; 16th, bromid. sod. 7.77; 17th and 18th, each 9.71.

There was, in this case, a complete absence of all the effects mentioned in case I., with the exception of only two, viz., the hypnotic action and the mental symptoms. About the former of these there was nothing remarkable. As to the latter, it appears that temporary insanity set in suddenly on July 26th, or about a week after the last of the bromides had been taken. The manifestations in this case were those of acute mania, accompanied with delusions, etc., etc. Recovery took place in about ten days.

It may be advanced that the mental trouble here was due to the sudden breaking off of the morphia. In reply, I would state that this is unlikely, inasmuch as there was, from the time the bromism had been produced, a total absence of all desire or craving for the drug. I am free to confess, however, that at the time, and in the absence of the light which further experience afforded me, I did not myself attach so much importance, as an etiological item in this respect, to the bromides, as I do at present.

Case III.—This was the same patient as Case I., and forms a subsequent chapter in his history. He was cured of the morphia methomania, but came back to me in the beginning of May, on account of his hysterical trouble. After a varied treatment, I again had recourse to bromides. He was very restless, melancholic, and depressed, complained of gastric pain (he is absolutely free from any organic gastric affection), etc. On May 30th, the bromide of potassium

being employed throughout, he received 4.0 (℥ i.) at 5.40, 6.35, 7.30, 8.30, 9.00, and 10.00 P.M., 12.00 night, and 1.00 A.M. of May 31st.

He had now received over 31.0 (℥ i.) of the salt in a little over seven hours. *He neither slept, nor manifested a single one of the ordinary effects of large doses of bromides*, although they were administered largely diluted, on an empty stomach. He felt restless and miserable during the following day, and in the evening resumed as follows:

May 31st—7.50 P.M., 5.8 (℥ iss.); then 3.9 at 11.55 P.M., and at 1.00, 3.00 and 4.00 A.M. of June 1st.

No quiescent effect was as yet perceptible, and, mindful of the effects on his mind of the former bromization, a repetition whereof I was desirous of avoiding, I stopped the remedy. During the day his condition remained unchanged. At night he slept a little. Next day (June 2d) no other medication having meanwhile been instituted, he slept the greater portion of the day, all through the next night, and nearly all the succeeding day (June 3d) and night. He slept thus almost continuously for 48 hours, to the morning of June 4th. It thus appears that in this instance the only effect of the bromide was the hypnotic; that this was not immediate, but limitedly remote, over 24 hours elapsing before its manifestation. This retardation was no doubt due to the opposing influence of the existing hysteria. After a few nights' regular sleep, the hysteria disappeared for the time.

I will now briefly consider in how far my observations, as above recorded, are of practical value. *I shall leave untouched those that agree with the recorded observations of others*, as offering nothing new.

Cardiac Action.—Most observers speak of the pulse as becoming "slower and more feeble," while others (Saison, Damourette and Pelvet, Laborde) deny all influence on the heart. In my first case the pulse became much more *frequent* and feeble; in the other two it remained unaffected.

Respiration. The stertor I noticed in Case I. I have not seen recorded elsewhere. On the contrary, Clarke* speaks of the respiration as "without the stertor of opium and alcohol."

Of the transient abrogation of *hunger* and *thirst* I have seen nothing mentioned elsewhere.

The *conjunctivitis* may have been accidental.

It is remarkable that no *acne* appeared in any of the cases.

With respect to the *urine* my observations are totally at variance with those of all other observers, with the exception perhaps of Rabuteau. In no instance did I find an increase, and in Case I. a positive and marked decrease of this excretion. This circumstance would appear to militate against the views of Drs. Amory and E. H. Clarke, of Boston, and Dr. McElroy, of Zanesville, O., that "the bromides encourage a destructive metamorphosis of tissue." I am of opinion, rather, that the emaciation accompanying the prolonged bromine influence is due to the retardation of *assimilative* metamorphosis (of food), as shown by Dr. Bartholow, of Cincinnati. Rabuteau claims that there is no change, either quantitative or qualitative, in the urinary excretion.

What I have said under the head of *Sensation* shows 1) the absence of the (true) anæsthesia that is generally considered so uniform an effect of bromization, and 2) the presence of reflex action, the loss of which is insisted on more especially by Echeverria.

My observations on *Motion* exclude the "general paralysis" claimed by many, and introduce a new phenomenon, viz., *temporary loss of co-ordination.*

The Mind.—What I have observed in this connection is nothing new. It appears probable, however, that the temporary insanity accompanying or following acute bromism takes form in accordance with the temperament and disposition of the individual. Thus, in an excitable person we should have delirium or mania; in one prone to dejection, simple or suicidal melancholia; in shallow-minded individuals, idiocy, imbecility, or a merely apathetic condition, etc., etc.

There is one further conclusion at which I think myself justified in arriving as a result of my observations; it is: that *the effects of the bromides are due, not to the alkali, but the bromine.* A study of the manner in which the bromides were here administered, and of their attendant effects, will, I believe, furnish ample proof in this direction. So far as my individual judgment goes, both the sodium and calcium bromide are superior to the potassium for the purpose of obtaining the effects of bromine.

NEW YORK, 160 SECOND AVENUE.

* Clarke on Bromides, Boston, 1872, p. 59.

Progress of Medical Science.

ABDOMINAL SECTION AND COLOTOMY FOR INTESTINAL OBSTRUCTION.—Surgeon-Major J. Johnston, M.D., gives an interesting account of a case upon which he operated. A woman, 30 years of age, was admitted to the hospital on the 25th of September, 1875. A few months previously she had given birth to her second child, and during the latter five months of gestation was troubled with extreme constipation. After the birth of her child the bowels were never moved without strong medicine. When admitted, she complained of great pain on the right of the umbilicus, and of intermitting pains on the left of the same. The abdomen was tympanitic, but not more so on one side than another. A large enema brought away hardly any fæces; the pain was relieved by opiates. For several days enemata of warm water were repeated, the tube at length passing in about eleven inches; but no fæcal matter was discharged. Three weeks after admission the symptoms became much aggravated, the pains being very violent and uncontrolled by opiates, the pulse 120, temperature 101.2°, and the abdomen enormously distended. An operation being deemed advisable, an incision was made, under chloroform, from the umbilicus to within an inch and a half of the pubes. The cæcum and ascending colon were found greatly distended with fluid fæces, and, as the transverse colon then appeared to be the seat of the obstruction, and was beyond reach, the cæcum was transfixed by a strong silk thread and held in position, while the protruding intestines were replaced, and the upper portion of the wound was brought together. The gut was then opened in the long axis by an incision one and a half inches long, and its margins were stitched with strong silk sutures to the abdominal wall. There was a large quantity of dark brown, putrid, semi-fluid fæces and flatus, which continued for several days. Nine days after the operation the patient passed healthy, well-formed fæces from the artificial opening, and three days later all the sutures were removed. Fourteen days subsequently it was observed that a quantity of damson and raisin-stones and skins and vegetable marrow seeds were passed with the fæcal matter from the colon. It was then found that she had

eaten damsons and the other articles two months previous to her admission to the hospital. Subsequently immense quantities of hardened fæces containing these stones were tunnelled out of the transverse colon. On the 1st of May, 1876, seven months after the operation, hardened stools were passed for the first time by the natural channel, although the artificial opening was as large as ever. From that time the bowels were moved daily by the natural channel, and contraction of the artificial opening was aided by firm strapping with adhesive plaster. For eight months there had been no free natural passage of fæces per rectum.—*Obstetrical Journal*, November, 1876.

Diseases of the Pancreas.—Dr. J. E. Lockbridge, of Indianapolis, thinks that writers on the practice of medicine have treated the diseases of the pancreas too slightly. He sees no reason why we should not meet with diseases in this organ as well as in others. During the last ten years he has seen a number of cases in which he thinks the pancreas was the seat of the disorder. In the first ten years of his practice he had not directed his attention to the pancreas, because, as he says, he was taught to believe its affections were very rare, so that probably they were overlooked. Dr. L. says the disease may be taken for dyspepsia, liver derangement, scirrhus of the pylorus, aneurism of the abdominal aorta, enlarged spleen, floating kidney (left), or an accumulation of fæces from obstruction of the transverse colon. There are two symptoms which he considers pathognomnic of pancreatic disease: a tumor situated between the pit of the stomach and the umbilicus, and the constant passage through the bowels of the undigested fatty portions of the food, with an inordinate desire for fat meats.—*Atlanta Medical and Surgical Journal*, November, 1876.

Albuminuria as a Symptom of an Epileptic Attack.—In a paper published in Vol. 59 of *Virchow's Archives*, Dr. Huppert maintained that a transitory albuminuria occurs after every epileptic fit, whether typical or abortive. Dr. Kauer, on the other hand, examined the urine in twelve cases with more exact tests, and his results were entirely negative. In the hope of settling this disputed point, Dr. Otto, of Pforzheim, examined the urine after thirty-one epileptic fits, and concluded that a transitory albuminuria often, but not always, follows the attack. He examined the urine drawn immediately after the attack, and also that drawn two hours later. His tests were heat, nitric acid, and ferrocyanide of potassium. In the urine drawn immediately after the attack, albumen was found six times, in greater or less abundance; in the urine drawn two hours later, it was found twenty-two times; in the urine drawn a third time, at a later period, no albumen was ever found. These thirty-one attacks occurred in twelve patients, and the twenty-two attacks which were followed by albuminuria occurred in seven patients. Sometimes in the same patient, albuminuria would occur after one attack, but not after another. Dr. Otto never found albuminuria after an abortive epileptic fit.

This albuminuria is undoubtedly due to the disturbance in the circulation and the blood-pressure during the attack, and consequently its duration cannot exceed that of the attack itself. The urine drawn immediately after the attack is seldom albuminous, because the urine excreted by the kidneys during the attack, which would alone contain the albumen, has not yet reached the bladder. The albuminuria is consequently of no practical importance. —*Berliner klin. Wochenschrift*, October 16.

Salicin in Acute Rheumatism.—In the *Lancet* of October 18, 1876, Dr. J. Maclagan strongly recommended large doses of this drug frequently repeated, by which means the pain and fever were more rapidly subdued. In very acute cases in adults he gave twenty grains every hour until the pain was relieved, after which, twenty grains every two hours, till the temperature was normal. For one week afterwards the same dose was given four times a day. As to cardiac complications being prevented by the rapid action of the salicin, he has no doubt. He also is of the opinion that if salicin or salicylic acid, in large and repeated doses, should ultimately come to be the only treatment for acute rheumatism, the next generation would be far more free from valvular diseases of the heart. In fourteen cases which the Doctor has treated, where the heart was intact when the treatment commenced, in not one did any cardiac complication develop itself. He considers salicylic acid to have much the same action as salicin, as an anti-pyretic and anti-rheumatic. Salicin has the advantage of being an excellent tonic, and never causes troublesome symptoms. In the *Lancet* of November 18, 1876, Dr. John Curnow gives four cases of rheumatism, three of which were quickly relieved by the salicin treatment; but in the fourth, the absence of any relief, and the powerlessness of the remedy to allay the fever and the pericarditis, made him hesitate to accept Dr. Maclagan's dictum, that salicin given in sufficient and early doses prevents cardiac complications, and that its free administration is the best means of staying their progress after they have occurred.

Fireproof Scenery.—Mr. Dion Boucicault, the well-known dramatic author, recently, at Wallack's Theatre, gave an exhibition of the means by which stage scenery could be rendered fireproof. Two drop-scenes were used for the purpose of illustrating the experiment. One of them was painted in imitation of foliage, the other was in its original state. Mr. Boucicault addressed the audience, saying that the scenes shown had been simply washed with a mixture comprising tungstate of soda, silicate of soda, and water. It was no "new invention," but had been in use for fifty years, although not in general use. Mr. B. next took a section of ordinary garden-hose, to which was attached a brass nozzle, and which was connected with the gas metre. Having ignited the gas, he held the flame directly on the hanging scenes. There was no ignition of the canvas, and when the flame had been held steadily in one place for fully half a minute, the only result was a hole two inches in diameter, while the canvas for the radius of about six inches was charred, and crumbled upon being handled. A piece of wood dipped in the solution was held in the flame for nearly a minute, with the simple result of crisping the part touched by the flame, while a coil of rope which had been saturated with the mixture was held in the full force of the flame without impairing its usefulness. The painters discovered that in using this mixture the use of glue as sizing would be rendered unnecessary, and as it is much less expensive, the managers will benefit by the economy, while rendering their theatres fireproof. The expense of applying the solution to a set of scenery and surroundings will only amount to from $100 to $200, and the reduction in the rate of insurance will cover that amount.

Scarlet Fever and Diphtheria are epidemic in different parts of the country.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., Editor.

PUBLISHED BY

WM. WOOD & CO., No. 27 Great Jones St., N. Y.

New York, December 30, 1876.

THE METRIC SYSTEM IN PRESCRIPTIONS.

Before discussing the expediency of employing the metric system in prescriptions, we will consider the objections that have been made to its use. Of these, the majority have been raised by persons unacquainted with the matter, and whose views consequently were founded upon misapprehensions.

Obj. 1. "The system is complicated and difficult to learn." This is a very prevalent, but very erroneous impression, and one which the article in our last issue has answered in advance. Surely, the three data there given, by means of which an ordinary prescription may be changed into a metric one, are not very difficult to remember or to practice. They are, moreover, but temporary expedients, because, after a few weeks' use of metrics, the prescriber begins to think in this system, and insensibly contracts the habit of estimating the doses in centigrammes or grammes, instead of in grains, drachms, or ounces.

Obj. 2. "The use of the metric system will throw us out of uniformity with English practice." Although our system of weights is the same, our fluid measures are not the same as those in use in England, as we have before shown.* This objection consequently falls.

Obj. 3. "To understand the metric system properly, and to use it intelligently, a person should forget the units of length, volume and weight to which he has been accustomed." If the propositions here stated were true, this indeed would be a fatal objection. For a hundred years we have been endeavoring to forget the *shilling*, and have not as yet succeeded; it is therefore not likely that the yard, gallon, or pound will escape our memories until long after the metric system shall have been practically established among us. Nor is it necessary that we should forget them, unless the author of this third objection wishes to assert that we cannot, and therefore do not use our present monetary system intelligently, because we still remember that the "York" shilling is 12½-100ths, and the "Boston" shilling 16⅔-100ths of our present monetary unit. We are certainly inclined to believe that the average medical mind is capable of obtaining a clear conception of the GRAMME, without previously forgetting the value of the *grain*.

Obj. 4. "The druggists are not familiar with the metric system." In reply we will state that, as a rule, druggists at the present moment know more about the metric system, both theoretically and practically, than physicians do, and that many of them are strongly in favor of its adoption.* An experienced apothecary writes: "Allow me to express my great satisfaction to find such a proposition emanating from the medical profession, in which I recognize an appreciation of the feasibility, as well as a necessity for a change from the old to the new system." He further writes: "While the pharmaceutic profession has in the main been the champion of the modern system, the medical fraternity, generally, took the opposite ground.† The druggists, then, are not so wholly ignorant of this matter as many physicians suppose. Further, the County Medical Society at its last meeting directed its Secretary to notify all druggists in this city of the resolution concerning the metric system, which the Society at its previous meeting had adopted. The receipt of this notification will at once put the apothecary upon his guard, and he will prepare himself accordingly.

Obj. 5. "The druggists have not the requisite weights, and hence will calculate a metric prescription back into Troy weights, and in doing so may make mistakes." This appears to us to be the only valid objection that has yet been offered, but its importance, we think, has been over-estimated. It is, moreover, a difficulty that can be easily remedied. Personally, we have used the metric system almost exclusively for about a year; others have used it for longer and shorter periods, and we have not yet heard of the occurrence of any mistake through this cause. Many of the druggists already possess metric weights, and those who have not will hardly hesitate to procure them, if requested by physicians whose prescriptions they are in the habit of compounding. Let every physician who desires to use the metric system go to the drug stores nearest his residence and inform the proprietors thereof of his intentions, and also state that he expects proper weights to be employed. The probabilities are that within twenty-four hours the apothecary will be suitably provided, as there is in the city at the present time an ample supply of metric weights of good quality. In buying metric weights — in fact, weights of any sort,

* MEDICAL RECORD, Dec. 9, 1876.

* Among those who recommend the use of the new system may be mentioned, Criswell, Hazard & Co., Neergaard, Helchardt, Rice of Bellevue Hospital, Elmer & Amend, Dyer, and many others.

† Extract from documents laid before the Committee Minerva.

we would urge the druggist not to buy any sets to which the maker has not attached his name, as this is the surest guarantee of accuracy, except actual comparison with standard weights. We further recommend him to buy sets arranged in such manner that any piece can be balanced by the sum of several pieces of lower denomination. This enables the purchaser to readily test the weights himself, and if they are found to properly agree among themselves, it is presumptive evidence of their individual accuracy. On the other hand, if they do not agree, the set should be absolutely rejected.

Having now considered the principal objections that have been raised, we will proceed to inquire into some of the advantages of metric pharmacy, and into the reasons which should influence our choice.

1. Its extreme simplicity, and its comparative convenience for mental and other calculations, are strong arguments in favor of the system. It is these which have induced one nation after another to adopt it. At the present time it is wholly in use in the greater part of continental Europe, including Russia (after Jan. 1, 1877), in Mexico, and many South American countries, etc., with populations aggregating 452 millions; partly used by populations numbering 48 millions ; not used in England, pop. 32 millions.

2. It will bring our pharmacy and our literature into unison with the major part of the civilized world. The New York Medical Journal Association, which endeavors to cater to the literary wants of the greatest number of its members, subscribes to seventy-seven periodicals, of which twenty-two are American, fourteen English, seventeen French, twenty-two German, and two Italian; that is, there are forty one journals in which all quantities are expressed metrically, against thirty-six in which the old system is employed. Furthermore, English and American medical literature is not wholly free from metric permeation. Drs. Otis and Sands give us their ideas concerning the calibre of the male urethra, expressed not in inches, nor in lines, but in *millimetres*, while Dr. Keyes tells us how many red corpuscles there are in a *cubic millimetre* of syphilitic blood, etc. We see, then, that if we would fully comprehend European literature, and a considerable portion of our own, we must make ourselves familiar with the metric system in all its details, and the man who fails to do so puts himself at a disadvantage in comparison with his more intelligent or industrious rivals.

3. In prescribing by the metric system, there is a fair prospect of our patients getting the quantity of medicine that we order. A gramme is a gramme the world over, but an ounce is not always the same, even in this city.

4. The serious inaccuracies which attend the employment of glass graduates will be abolished.

Having now given an exposition of the manner in which our prescriptions are at present dispensed, and having explained the metric system in such a way that any one willing to give a half-hour's study to the subject can master it both in principle and detail, and having considered the objections which have been raised, we believe that most of our readers will agree with us that there is a present necessity for a change of some sort; that the metric system is not as complicated and abstruse as many suppose; that its real merits far outbalance its demerits; and that the inconveniences connected with its introduction and employment will be far less than those which would attend an effort to redeem our present system from the abuses that have been engrafted upon it. The only hope, it appears to us, lies in a new broom. Reform is needed. Years ago the extensive adulteration of medicines imported into this country led to the appointment of a government inspector, who seizes at the custom-house adulterated drugs; later, the lack of uniformity (through ignorance or design), in our officinal preparations, led to the establishment of Dr. Squibb's manufactory of standard medicaments; still later, the ignorance and incompetency of so many druggists and drug clerks, brought into existence the Board of Pharmacy, whose duty it is to see that all who compound medicines are competent to do so. We must now go a step farther, and by the use of the metric system bring about uniformity and certainty in the dispensation of prescriptions.

One of the most notable events in the history of our County Medical Society was its inauguration of the movement which led to the formation of the National Pharmacopœia. Of almost equal importance is the action which it has recently taken upon the matter under discussion—action that clearly indicates the progressive tendencies of its members, and their determination not to lag behind the rest of the world in matters of such vital importance. Under these circumstances, then, we have little doubt of a very general adoption of the metric system in this city, and of its early extension to other parts of the country.

THE CLOSE OF VOLUME XI.

In closing the volume for the present year, we take occasion to express our obligations to contributors and to the different members of our staff for the invaluable aid which they have given us. The original articles have been contributed by leading writers from different parts of the country, have been selected with great care from a wide range of subjects, and as far as possible the best interests of our readers have been consulted. The lectures have been confined to the discussion of such diseases as are met with in ordinary practice, and it is to be hoped, have fulfilled their purpose of suggesting new points for study and new ideas for treatment. The practice of the hospitals has been regularly reported, as have also been the transactions of the leading medical societies,

not only in this city, but all over the country. The labors in the department of progress of medical science have been particularly arduous. The greatest pains have been taken in culling from the periodical medical literature of the world everything of practical value. Every item in this department has been abstracted from the original sources and translated from all the different languages in which such publications are made. We have also endeavored to be strictly impartial in our review department, entrusting all special subjects to leading experts in this city and elsewhere.

In the discussion of editorial subjects we have aimed to lead professional opinion into the channels best calculated to subserve our true interests as a class, and those of the public to which we are so intimately and responsibly bound. It has also been our aim to publish the latest medical news from the Old as well as the New World; our unusual facilities for so doing, and the conscientious care which we have exercised in discharging our obligations, causes us to hope that we have succeeded in our undertaking.

In saying thus much we have no desire to have it understood that we have performed all the labor to this end. Ordinary modesty compels us to say that whatever of interest and value appears in the present volume has been due to others. To the various members of our staff we are indebted for invaluable aid. It is a pleasant task for us to acknowledge their labors in their respective departments, and allow each reader to form his own estimate of their value.

Dr. Wesley M. Carpenter has furnished the journal with the reports of societies, here and elsewhere, of the majority of the medical lectures, together with the reports of the practice in the hospitals.

Dr. Richard J. Dunglison, of Philadelphia, has during the past year contributed many articles of value, not the least of which have been his reports of the International Medical Congress, the American Medical Association, and his admirable letters upon Medical Centennial Affairs.

In the department of Progress of Medical Science, Dr. George R. Cutter has had charge of the Scandinavian, Dutch, Italian, Spanish, and Portuguese journals; Dr. H. D. Joy, of the English and American; Dr. J. Haven Emerson, of the German; and Dr. J. A. McCreery of the French, the latter gentleman having also contributed many separate articles in other languages.

For special assistance in our strictly editorial labors we are indebted to Dr. E. M. Hunt, of New Jersey, for his articles on Hospital Construction and Organization; to Dr. R. W. Taylor, for his review of the English Debate on Syphilis; to Dr. T. E. Satterthwaite, for the report of the Record Commission on the Health of Philadelphia; and to Dr. H. G. Piffard, for his recent contributions upon the Metric System in Prescriptions.

THE MANAGEMENT OF OUR ASYLUMS.

In advance of the report of the Commissioner of Lunacy concerning the Bloomingdale Asylum affair, we are warranted in saying that there are no substantial grounds upon which charges of mismanagement can be founded. It is somewhat surprising, notwithstanding the exciting discussion in the newspapers concerning asylum cruelties, that no new atrocities have come to light save those which are based upon the loose and irresponsible assertions of anonymous correspondents.

HEATING STREET CARS.

The public discussion concerning the heating of street cars is likely to result in some good. Already the railroad managers are beginning to give serious attention to the subject, with a view of deciding upon the best means to be used. So far there is no agreement except upon one point, that the stove, as a heating apparatus, is out of the question. Various footpans are suggested, but as these will give a good deal of trouble to the companies, it is not likely that they will be adopted. In the meanwhile the passengers must be content to wait and to shiver. The ventilation of our street car is another question worthy of attention, and one which cannot always be satisfactorily settled by a draft from an open window. The officious passenger who believes in this method of gaining fresh air has commenced his operations for the season.

Reviews and Notices of Books.

A Treatise on the Science and Practice of Midwifery. By W. S. Playfair, M.D., F.R.C.P., Professor of Obstetric Medicine in King's College London, Examiner in Midwifery to the University of London, Physician for the Diseases of Women and Children to King's College Hospital, etc., etc. American Edition. Philadelphia; Henry C. Lea. 1876. 8vo, pp. 565.

This is a well arranged and concisely written, compact manual, which bids fair to become a standard authority on the subject of which it treats. The science and art of obstetrics is presented in a very comprehensive and systematic manner, proving at once the practical qualities of the author, not only as a medical writer, but as a successful medical teacher. He has the faculty of bringing out the salient points of every topic and of presenting them in a very interesting and intelligible manner. A very natural division of the subject-matter is made, and the reader is taken by gradual and easy steps from the study of the anatomy of the generative organs, through the physiology of conception, generation, pregnancy, labor, obstetric operations, and the puerperal state. To follow our author from chapter to chapter would be to give but a recital of the practical points of the obstetric art which are worth remembering. It is saying everything else for it to remark that it is thoroughly up to the requirements of the times, and is destined to be one of the most useful hand-books in that department. It is profusely illustrated and well printed.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, Dec. 7, 1876.

DR. S. S. PURPLE, PRESIDENT, IN THE CHAIR.

RESULTS OF CLINICAL STUDY RELATING TO PHTHISIS.

PROF AUSTIN FLINT presented the results of his clinical study which had been obtained from records made upon six hundred and seventy cases of phthisis observed during a period of thirty-five years. These results had been published in book-form as a contribution to the study of phthisis; but the doctor felt inclined to make them the subject of a paper because they embodied an honest search after truth; because he regarded them as important negatively, if not positively; and because a reviewer of his volume in one of the medical journals had made the statement, "that hardly a single new fact had been given," and "that it was to be regretted that so much labor had been expended with so unsatisfactory results."

Some of the conclusions at which Prof. Flint had arrived were the following:

With regard to the statement that the chief source of danger in phthisis was secondary, "that the patient is apt to become tuberculous," as Niemeyer would have us believe, the doctor had arrived at the conclusion that the danger in the great majority of cases was not from the development of granulations, or miliary tubercles. The latter was an exceedingly rare occurrence as the cause of death. The chief danger was from exudation into the air-cells, with subsequent damage to the pulmonary structure or from grave complications. For, out of sixty-three cases it seemed fair to attribute considerable importance to the granulations or miliary tubercles, which were present in fourteen, while in the remaining twelve their importance was comparatively small.

With regard to the question whether phthisis is commonly preceded by

BRONCHIAL CATARRH, ACUTE OR CHRONIC, PLEURISY OR ACUTE PNEUMONIA,

Prof. Flint reached the conclusion that such was the fact in only a small proportion of cases. For in only nine cases was it noted that the phthisis was preceded by pneumonia; and in only six did the phthisis follow the pneumonia quickly. Of one hundred and three cases of

ACUTE PNEUMONIA,

in not a single one was the disease followed immediately or quickly by evidences of phthisis. His observations had corroborated the conclusions of Louis, in that when persons already tuberculous were attacked with pneumonia, the termination was generally in recovery. With reference to

PLEURISY

occurring antecedently to the development of phthisis, it was noted in twenty-two cases. In eleven of them the phthisis appeared to follow the pleurisy quickly or immediately. It was concluded that pleurisy was rarely followed by phthisis. The antecedent presence or absence of

BRONCHITIS

was determined by facts relating to cough and expectoration. There were one hundred and twelve cases. Of those, seventy-two had cough for a length of time, varying from a few weeks to several months, but the cough was dry, a fact which warranted the exclusion of bronchitis as a primary step towards the development of phthisis. In only one of the whole number of cases was expectoration present at the commencement of the cough. This conclusion was not in conformity with some late teachings by a German school, of which Niemeyer was the exponent. With reference to

CHRONIC BRONCHITIS,

it was regarded as a matter of common clinical experience that it was one of the rarest of rare things for it to be followed by phthisis.

BRONCHIAL HEMORRHAGE AND PHTHISIS.

The question of the relation between bronchial hemorrhage and phthisis was considered. Prof. Flint's conclusion was, that hemoptysis was not a cause of phthisis, as asserted by Niemeyer, although it was believed to be a forerunner of phthisis. Such conclusion had also been substantiated by the statement made by John Ware, who analyzed three hundred and eighty-six cases. The result obtained by the doctor's study, further showed that Niemeyer was correct in the statement that bronchial hemorrhage implied a predisposition to phthisis; it was not evidence that phthisis actually existed, but the instances in which the subjects were exempt from it after having had the hemorrhage were exceptions to the rule.

With reference to the development of phthisis by the local effects produced by

COAGULATED BLOOD IN THE BRONCHIAL TUBES

it was believed by Prof. Flint that the affirmative of such a proposition had no rational support. Ware's statistics had proved the incorrectness of Niemeyer's saying, that bronchial hemorrhage was an unfavorable omen in the course of phthisis, and hastened a fatal termination. Prof. Flint's studies had led to the same results obtained by Ware, and the conclusion was reached that bronchial hemorrhage, occurring in the course of phthisis, was not unfrequently followed by a sense of relief, and other evidences of improvement.

RECOVERY FROM PHTHISIS.

It was a noteworthy fact in Prof. Flint's collection, that there were forty-four cases in which complete recovery took place, as evidenced by the disappearance of all pulmonary symptoms; by the regaining of the usual weight, muscular strength and general vigor; and by the fact that physical exploration failed to disclose any signs of morbid process in the lungs.

It was believed to be the largest aggregation of cases in which recovery from phthisis had occurred that medical literature afforded. From a careful study of those cases, it was thought to be a fair conclusion that circumstances, irrespective of treatment, which were common to all, or to a large majority, had a greater or less effect in bringing about such recovery. Other things being equal, the prospect for recovery was in proportion as the amount of the phthisical affection was small. Considerable extension of the disease, and the existence of cavities, however, did not preclude recovery. The tendency to recovery was greater before than after thirty years of age; the earliest of the cases reported being nineteen. Sex in this respect had no influence. Absence of family predisposition had not seemed to have much influence.

Chronic laryngitis, pleurisy with effusion, and perineal fistula, were not unfavorable to recovery. Most

of the patients who recovered were persons of resolution and perseverance, and brought the power of the will to bear upon their physical condition.

RECURRENCE OF PHTHISIS.

With reference to the recurrence of the disease, the conclusion was reached that it occurred in about one-seventh of the cases, and that the time of recurrence varied from eighteen months to six years.

In all the cases in which a single recurrence had taken place, the recurrent affection had proved fatal. Recurrence, at best, was to be regarded as unfavorable.

ARREST OF PHTHISIS.

In some cases of phthisis there was an arrest of the disease, although recovery did not take place. Thirty-two cases had been collected belonging to that category; and in sixteen, considerable cavities had been formed in the lungs. Although such an amount of disease was unfavorable to recovery, it did not preclude arrest, and many years might elapse without progress.

FATAL CASES OF PHTHISIS.

From the study of the fatal cases, it was concluded that the duration of the disease was shorter in women than in men; that occupation seemed to have no influence either in shortening or prolonging its duration; that the duration was shorter after than before thirty-four years of age; and that the intemperate use of alcoholics had not seemed to shorten the duration of the disease.

INTRINSIC TENDENCY OF PHTHISIS TO RECOVERY.

The somewhat astonishing conclusion had also been reached by the doctor that phthisis, in a certain proportion of cases, tended intrinsically to recovery; that the disease incurred arrest and ceased to progress from its own limitation.

That was a conclusion at variance with the general view held by the profession, and it was that fact that made it important.

It might be said that an error in diagnosis was more probable than an arrest of the disease; but the symptoms present in the cases which gave rise to the opinion were such as had led to the diagnosis of phthisis in all the cases that had been under observation.

In eight out of the forty-four cases which ended in recovery, there was no medicinal treatment; no material change in the habits of life; no hygienic treatment; in short, no appreciable influence brought to bear upon the disease. Recovery took place from intrinsic tendency; five were males and three females.

With regard to the influence of

HYGIENIC TREATMENT

the following conclusions were reached:

1. In the larger proportion of cases of chronic phthisis, benefit to a greater or less extent followed a temporary change of climate.

2. Change from sedentary to out-of-door habits was beneficial, perhaps more than any other single remedial measure.

3. Change of occupation, chiefly because it gave rise to change of habits, was favorable.

4. Permanent change of residence was regarded as beneficial in certain instances.

5. Sea-voyages exerted a favorable influence in a large proportion of cases, and sometimes such influence was very marked.

Concerning

MEDICINAL TREATMENT

the conclusion was reached that cod-liver oil was useful, although not potentially curative; that the hypophosphites and alcoholics also were useful.

The paper being open for discussion,

DR. O'SULLIVAN remarked that in his experience phthisical patients had received marked benefit from hygienic treatment. It had also been his opinion that chronic laryngitis was not commonly followed by phthisis.

PROF. FLINT remarked that there was no tendency in chronic laryngitis to lead to phthisis, and that when tiney were associated, the laryngitis was secondary to the phthisis.

PROF. A. L. LOOMIS remarked that the importance of such a work as had been done by Prof. Flint could not be overestimated, especially as the records had been made by one who in his earlier studies looked upon phthisis in an entirely different light than those who had been educated more recently.

It seemed to him that the first question to be decided was, what was pulmonary phthisis? In answering such a question very different views, necessarily, would be taken. It appeared to him, however, that from the present histological knowledge of phthisis, three distinct forms of the disease must be recognized; and that, in the recording of cases, in order to reach results which at the present day would be fully accepted, it was necessary to classify the cases under one of those three heads. There was catarrhal phthisis, tubercular phthisis, and bronchial phthisis, or what is called fibrous phthisis. When those three classes of cases were observed, it would be found that in a certain proportion recovery was possible, and that in another class recovery was impossible, no matter how favorable the circumstances, hygienic and otherwise, by which the patient might be surrounded. The latter class of cases were those which he should accept as tubercular phthisis, which was marked by an entirely different class of symptoms than those which mark the development and progress of catarrhal or fibrous phthisis. In obtaining the history of a case, the first questions commonly employed were, how long have you been sick, and how did the sickness begin? In more than one-half of the cases which had fallen under his observation, the patient had began to be sick by taking cold, had a sneezing, a cough, etc.; which ran along for a time, when they began to get better, but the cough never entirely passed away. Such a train of symptoms were significant, and meant that the patient had had a catarrh from which he had never entirely recovered. There had been left a dry, hacking cough, which had continued perhaps for six months, when the patient began to lose flesh and strength, perhaps had had a hemorrhage, and then as he came for examination evidences of pulmonary consolidation would be found. It was the opinion of Prof. Loomis that if the histories of cases were taken in that manner it would be found in a large proportion of cases the phthisis had been developed as a catarrh; that they had, at some time perhaps, been treated for nasal, pharyngeal, laryngeal, or bronchial catarrh. In another class of cases, the first thing noticed was a loss of flesh, which went on rapidly; fever, restlessness at night, impaired digestion, cough without expectoration, hemorrhage, rise in temperature, and a rise higher at the commencement than at any time during the progress of a catarrhal phthisis, until a large amount of lung consolidation had occurred. With such a history it could be determined that the case was one of tubercular phthisis from the beginning. There was another class of cases which used to be called "century phthisis," and those were cases in which the symptoms were due to chronic bronchitis

with fibrous induration of lung-tissue, dilatation of bronchii, etc., etc. Another fact to be taken into consideration in estimating the value of results derived from recorded cases, was the difference in the significance of physical signs among good diagnosticians. What one would regard as evidence of localized catarrhal pneumonia, another would claim as a sign of phthisis in the first stage. Perhaps the patient had had a hemorrhage, but he recovered, and he was put down as a case of recovery from phthisis by one; while in another's statistics the case would appear as one that had never had phthisis, but localized pneumonia. A case in point was cited in which there was evidence of pulmonary consolidation under the scapula, with bronchitis; and there had been a hemorrhage, probably bronchial. The man was examined by several eminent members of the profession, who stated that he had incipient phthisis; while others maintained that he did not have phthisis, but a localized pneumonia, from which he might with a great deal of certainty recover. The patient did recover, and subsequently died from another disease. At the autopsy the lungs were found perfectly healthy at every point.

Prof. Loomis believed that it was important that two factors should be taken into consideration in arriving at a conclusion in the study of this class of cases:

1. It was important to recognize three distinct forms of the disease.

2. It was important to agree as to exactly what was meant by the physical signs of incipient phthisis.

ARMY NEWS.

Official List of Changes of Stations and Duties of Officers of the Medical Department, United States Army, from December 17 to December 23, 1876.

Hasson, A. B., Surgeon. Granted leave of absence for fifteen days. S. O. 249, Div. of the Atlantic, Dec. 20, 1876.

Tilton, H. R., Surgeon. To take post at Cantonment at the mouth of Tongue River, M. T. S. F. O. 46, Headquarters Department of Dakota (in the Field), Sept. 11, 1876.

Forwood, W. H., Surgeon. Assigned to duty at Raleigh, N. C. S. O. 182, Department of the South, Dec. 16, 1876.

Brown, B. H., Asst. Surgeon. When relieved by Asst. Surgeon Spencer, to comply with orders from Headquarters of the Army in his case. S. O. 182, C. S., Department of the South.

Adair, G. W., Asst. Surgeon. Granted leave of absence for one month, with permission to leave the Department and apply for an extension of one month. S. O. 225, Department of Texas, Dec. 13, 1876.

Crampton, L. W., Asst. Surgeon. On return from leave of absence to report in person at these Head quarters for assignment. S. O. 247, C. S., Department of the Gulf.

Spencer, H. G., Asst. Surgeon. Assigned to duty at Fort Barrancas, Fla. S. O. 182, C. S., Department of the South.

Swearing to his own Idiocy.—At a recent Will trial in Toledo (Ohio) the defendant swore that at the time he executed the instrument he was "idiotic and of weak and unsound mind." This is the first case on record in which this very common explanation concerning one's idiocy was ever sworn to. Generally, however, this is not necessary.

Medical Items and News.

Contagious Diseases.—Comparative statement of cases of Contagious Disease reported to the Sanitary Bureau, Health Department, for the two weeks ending December 23, 1876.

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-Spinal Meningitis.	Measles.	Diphtheria.	Small-pox.
Dec. 16.....	0	10	71	2	4	61	1
" 23.....	0	7	55	2	4	41	0

Electric Light *vs.* Gas.—Prof. Doremus favors the project of illuminating the city by means of electric lights.

Long Island College Hospital.—Dr. Arthur Mathewson will deliver the next course of lectures (session 1877), on the diseases of the eye, in the Long Island College Hospital, in consequence of the temporary absence in Europe of Dr. Prout.

The Value of the Lactometer.—The Milk-dealers' Association have undertaken to defend a German grocer of this city, charged by the Health Board with adulterating milk. The trial is still in progress up to the time of our going to press. An attempt will be made by the defence to prove that the lactometer adopted by the Health Board is untrustworthy. At the completion of the trial we shall summarize the results. From present appearances the defendant, if he escapes punishment, will do so more as the result of legal technicalities than scientific facts.

Gas Stove.—A death from the fumes of a gas stove was reported on the 24th inst., at Providence, Rhode Island.

Insane Asylum in Brooklyn.—The Brooklyn Ladies' Union are initiating measures for the establishment of an asylum for the insane in Brooklyn.

Mount Sinai Hospital.—The annual meeting and election of officers of Mount Sinai Hospital was held December 24th. Mr. Adolph Hallgarten, the President, submitted his annual message, from which it was shown that, during the year ending December 1st, the Executive Committee had passed upon 1,516 applications for admission to the hospital; 1,466 were treated gratis, 50 patients paid for their treatment, 154 were refused on account of their cases not coming within the scope of the hospital practice; 1,516 patients were cared for during the year, of whom 104 remained, 964 were discharged cured, 320 improved, 23 not improved, and 25 left before treatment. The daily number of patients averaged about 115, and their average stay in the hospital was twenty-seven and one-half days. Seventy-four died, 15 of whom were admitted in a hopeless condition.

New York Pathological Society Transactions.—The New York Pathological Society has decided to publish the second volume of its Transactions without delay.

Salting Snow.—Several persons have been arrested for attempting to melt the snow in the streets by sprinkling salt upon it.

The Metric System is being adopted by many practitioners in this city.

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